ABB BALDOR RELIANCE

Customer information packet

VL5024A

1.5HP, 1725RPM, 1PH, 60HZ, 56C, X3546L, XPFC
Class - CLI GP D
Division - Division I

8/12/2026 12:52:18 AM

Specifications

Enclosure	XPFC
Frame	56C
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP D
Haz Area Division	Division I
Motor Letter Type	Cap Start, Induction Run
Output @ Frequency	1.500 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	115.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	UL
	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	16.000 A @ 115.0 V
	8.000 A @ 230.0 V
Design Code	L
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	75.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Haz Area Temp Code	T2C

Part Detail

Revision	AZ
Type	AC
Mech. spec.	35G198
Base	
Status	NLA/A
Elec. spec.	35WGX140
Layout	35LYG198
Eff. date	02-13-2023
CD Diagram	CD0008
Poles	04
Leads	3#16,3#18 B&J,1#14 #4TH
Proprietary	False
Created date	01-01-0001

Heater Indicator	No Heater
High Voltage Full Load Amps	8.0 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	J
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3546L
Mounting Arrangement	F1
Number of Poles	4
Overall Length	17.42 IN
Power Factor	78
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
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	1725 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Do Not Use Eve-Not Valiid
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	Automatic Thermal Overload

Winding Thermal 1 Location	EP
Winding Thermal 2	None

Nameplate

NP2204XPSL							
NO.		**CC**					
SER.							
SPEC.	35G198X140						
CAT.NO.	VL5024A						
HP	1.5	**T. CODE**	T2C				
VOLTS	115/230						
AMPS	16/8						
RPM	1725						
HZ	60	**PH**	1	**CL**	B		
SER.F.	1.00	**DES**	L	**CODE**	J		
RATING	40C AMB-CONT						
FRAME	56C	**NEMA-NOM-EFF**	75				
USABLE AT 208V	N/A	**PF**	78				
BLANK							

AC Induction Motor Performance Data
Record # 9948
Typical performance - not guaranteed values

Winding: 35WGX140-R001	**Type:** 3546L	**Enclosure:** XPFC

Nameplate Data				**230 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1.5	**Full Load Torque**	4.5 LB-FT
Volts			115/230	**Start Configuration**	direct on line
Full Load Amps			16/8	**Breakdown Torque**	11 LB-FT
R.P.M.			1725	**Pull-up Torque**	6.5 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	8.5 LB-FT
NEMA Design Code	L	**KVA Code**	J	**Starting Current**	47 A
Service Factor (S.F.)			1	**No-load Current**	4.55 A
NEMA Nom. Eff.	75	**Power Factor**	78	**Line-line Res. @ 25ºC**	1.42 Ω A Ph 1.4 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	77°C

Load Characteristics 230 V, 60 Hz, 1.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	41	59	72	79	83	86
Efficiency	61.7	73.9	77.8	78.6	77.9	75.9
Speed	1786	1774	1761	1746	1729	1708
Line amperes	4.85	5.55	6.55	7.85	9.4	11.3

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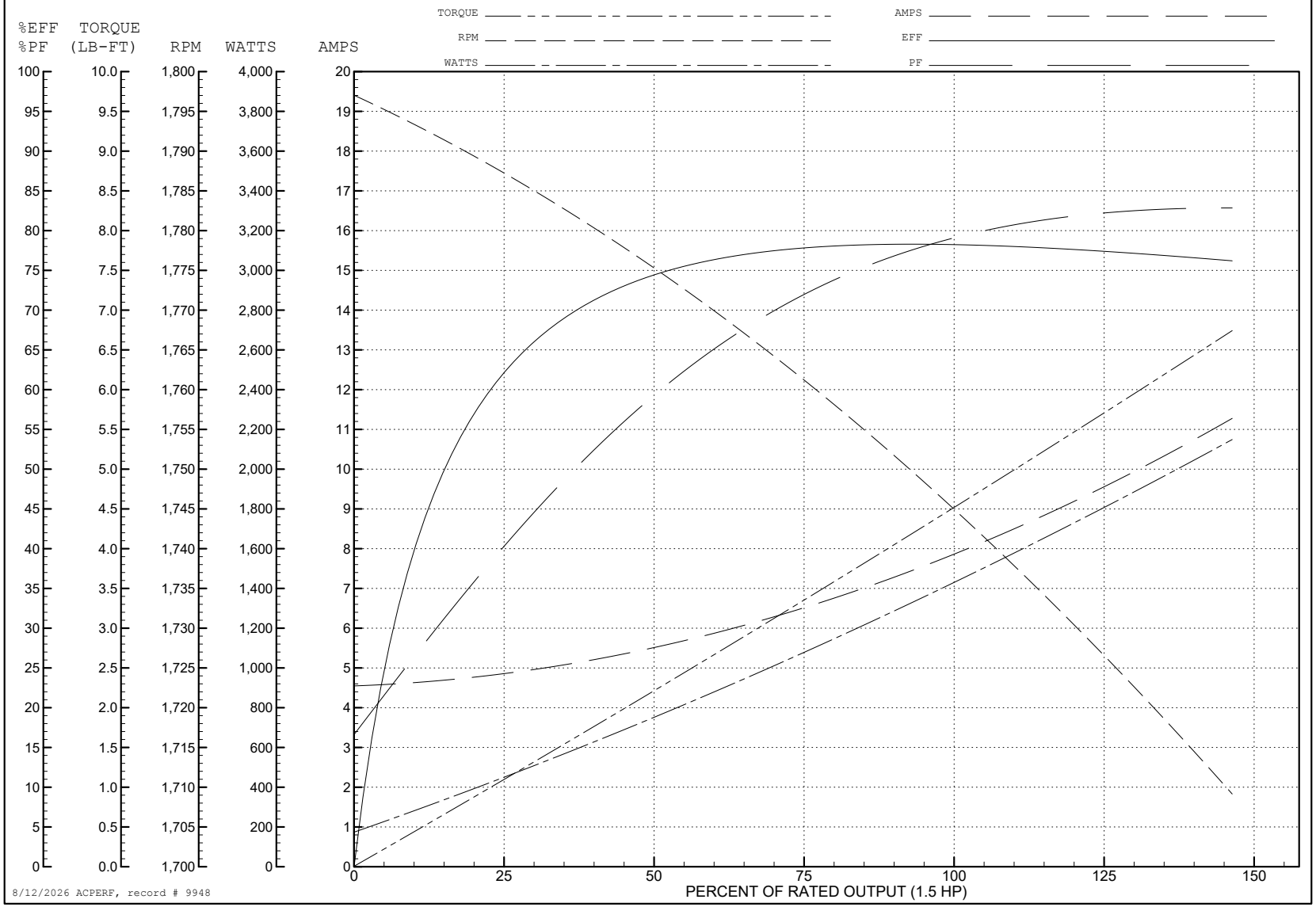
WINDING # 35WGX140

1.5 HP 1 PH 60 HZ 1725 RPM 230 V 3546L

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=11 PU=6.5 LR=8.5 LRA=47



AC Induction Motor Performance Data
Record # 79545
Typical performance - not guaranteed values

Winding: 35WGX140-R001	**Type:** 3546L	**Enclosure:** XPFC

Nameplate Data				**115 V, 60 Hz: Low Voltage Connection**	
Rated Output (HP)			1.5	**Full Load Torque**	4.5 LB-FT
Volts			115/230	**Start Configuration**	direct on line
Full Load Amps			16/8	**Breakdown Torque**	11 LB-FT
R.P.M.			1725	**Pull-up Torque**	6.5 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	8.5 LB-FT
NEMA Design Code	L	**KVA Code**	J	**Starting Current**	94 A
Service Factor (S.F.)			1	**No-load Current**	9.1 A
NEMA Nom. Eff.	75	**Power Factor**	78	**Line-line Res. @ 25ºC**	0.319 Ω A Ph 1.35 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	77°C
				Locked-rotor Power Factor	78.3
				Rotor inertia	0.273 LB-FT2

Load Characteristics 115 V, 60 Hz, 1.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	42	60	72	79	82	83
Efficiency	61.9	73.9	77.9	78.6	78	75.9
Speed	1786	1774	1761	1746	1729	1708
Line amperes	9.7	11.1	13.1	15.7	18.8	22.6

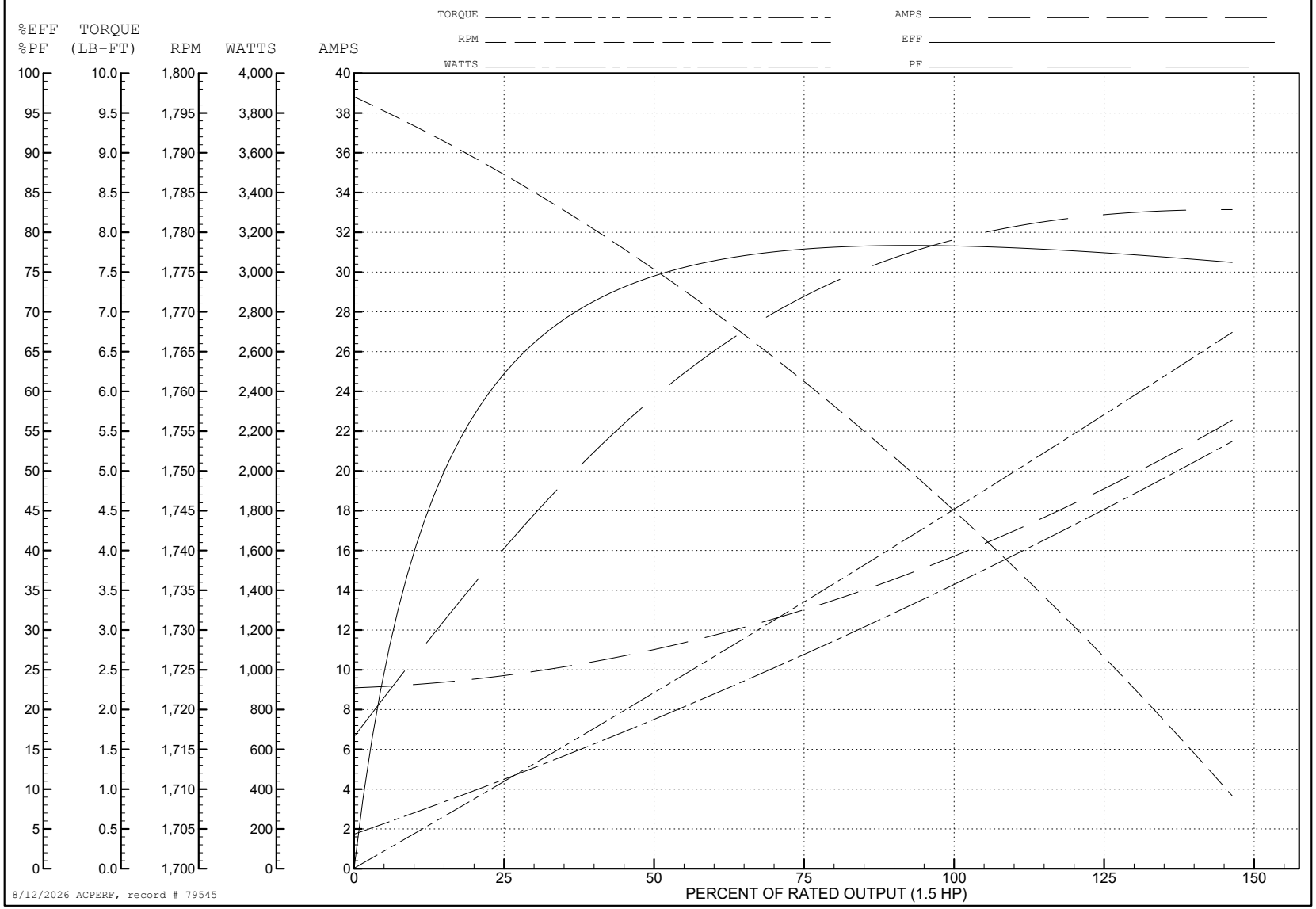
ABB Motors and Mechanical Inc.

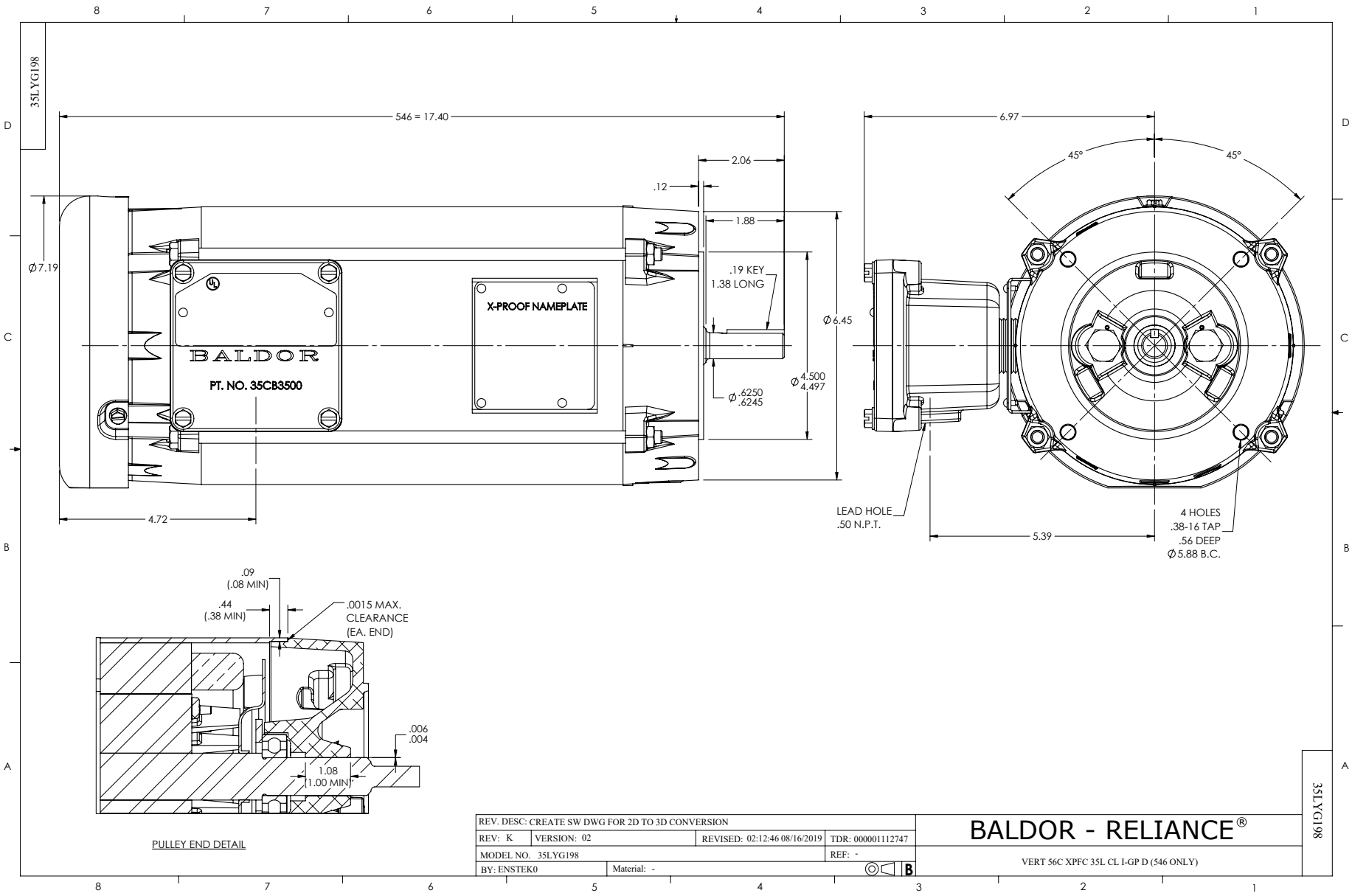
WINDING # 35WGX140

1.5 HP 1 PH 60 HZ 1725 RPM 115 V 3546L

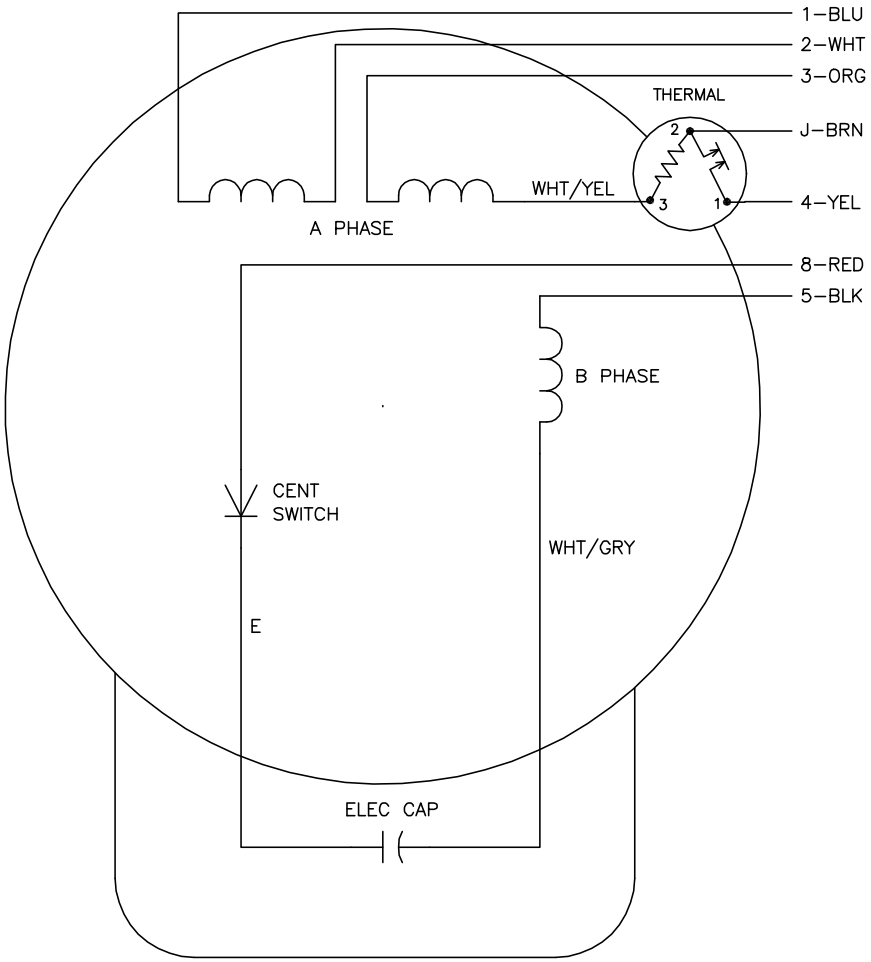
Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=11 PU=6.5 LR=8.5 LRA=94




35LYG198
546 = 17.40
2.06
.12
1.88
.19 KEY
1.38 LONG
Ø7.19
X-PROOF NAMEPLATE
BALDOR
PT. NO. 35CB3500
Ø6.45
Ø.6250
.6245
Ø4.500
4.497
4.72
6.97
45°
45°
LEAD HOLE
.50 N.P.T.
5.39
4 HOLES
.38-16 TAP
.56 DEEP
Ø5.88 B.C.
.09
(.08 MIN)
.44
(.38 MIN)
.0015 MAX.
CLEARANCE
(EA. END)
.006
.004
1.08
(1.00 MIN)
PULLEY END DETAIL
REV. DESC: CREATE SW DWG FOR 2D TO 3D CONVERSION
REV: K
VERSION: 02
REVISED: 02:12:46 08/16/2019
TDR: 000001112747
MODEL NO. 35LYG198
REF: -
BY: ENSTEK0
Material: -
BALDOR - RELIANCE®
VERT 56C XPFC 35L CL I-GP D (546 ONLY)
35LYG198

CD0008



	LINE A	LINE B	JOIN	JOIN
HIGH STD	1	4	2,3,8	J,5
HIGH OPP	1	4	2,3,5	J,8
LOW STD	1,3,8	4	–	2,J,5
LOW OPP	1,3,5	4	–	2,J,8

NOTES:

1. STANDARD ROTATION IS CCW FACING END OPPOSITE SHAFT EXTENSION.
2. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REMOVE 2–TERMINAL THERMAL DETAIL, SEE CD0008A02			BALDOR ELECTRIC Co.
REV. LTR: F	VERSION: 01	TDR: 000000360649	
CD0008	FILE: \AAA\00007\408	REVISED: 10:56:54 04/18/2005	TYPE L, DV, REV, THERMAL, 7 LEADS
	MTL: –	BY: ENJOEP0	

CD0008