Customer information packet

CL5031T

2HP, 3450RPM, 1PH, 60HZ, 143TC, X3535L, XPFC
Class - CLI GP D; CLII GP F,G
Division - Division I

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/21/2026 12:02:49 PM

Specifications

Enclosure	XPFC
Frame	143TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP D; CLII GP F,G
Haz Area Division	Division I
Motor Letter Type	Cap Start, Induction Run
Output @ Frequency	2.000 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	208.0 V @ 60 HZ
	115.0 V @ 60 HZ
Agency Approvals	CSA
	UL
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	23.000 A @ 115.0 V
	12.000 A @ 208.0 V
	11.500 A @ 230.0 V
Design Code	L
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	74.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	BE
Type	AC
Mech. spec.	35L966
Base	
Status	PRD/A
Elec. spec.	35WG0506
Layout	35LYL966
Eff. date	01-13-2026
CD Diagram	CD0001
Poles	02
Leads	4#14 A PH,2#18 B PH
Proprietary	False
Created date	06-27-2007

Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	11.5 a
Insulation Class	B
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	4 @ 14 AWG, A PH
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3535L
Mounting Arrangement	F1
Number of Poles	2
Overall Length	16.10 IN
Power Factor	82
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	1.00
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	3450 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1426XPSL							
NO.		**CC**					
SER.							
SPEC.	35L966-506						
CAT.NO.	CL5031T						
HP	2	**T. CODE**	T3C				
VOLTS	115/208-230						
AMPS	23/12-11.5						
RPM	3450						
HZ	60	**PH**	1	**CL**	B		
SER.F.	1.00	**DES**	L	**CODE**	K		
RATING	40C AMB-CONT						
FRAME	143TC	**NEMA-NOM-EFF**	74				
		PF	82				
BLANK							

AC Induction Motor Performance Data
Record # 20313
Typical performance - not guaranteed values

Winding: 35WG0506-R005	**Type:** 3535L	**Enclosure:** XPFC

Nameplate Data				**230 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			2	**Full Load Torque**	3 LB-FT
Volts			115/208-230	**Start Configuration**	direct on line
Full Load Amps			23/12-11.5	**Breakdown Torque**	9 LB-FT
R.P.M.			3450	**Pull-up Torque**	6 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	7.5 LB-FT
NEMA Design Code	L	**KVA Code**	K	**Starting Current**	78 A
Service Factor (S.F.)			1	**No-load Current**	6 A
NEMA Nom. Eff.	74	**Power Factor**	82	**Line-line Res. @ 25ºC**	0.864 Ω A Ph 1.26 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	78°C

Load Characteristics 230 V, 60 Hz, 2 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	50	65	75	81	85	87
Efficiency	49.1	64.2	70.5	73.4	74.3	74.1
Speed	3569	3548	3524	3499	3471	3438
Line amperes	6.65	7.75	9.2	10.9	12.9	15.1

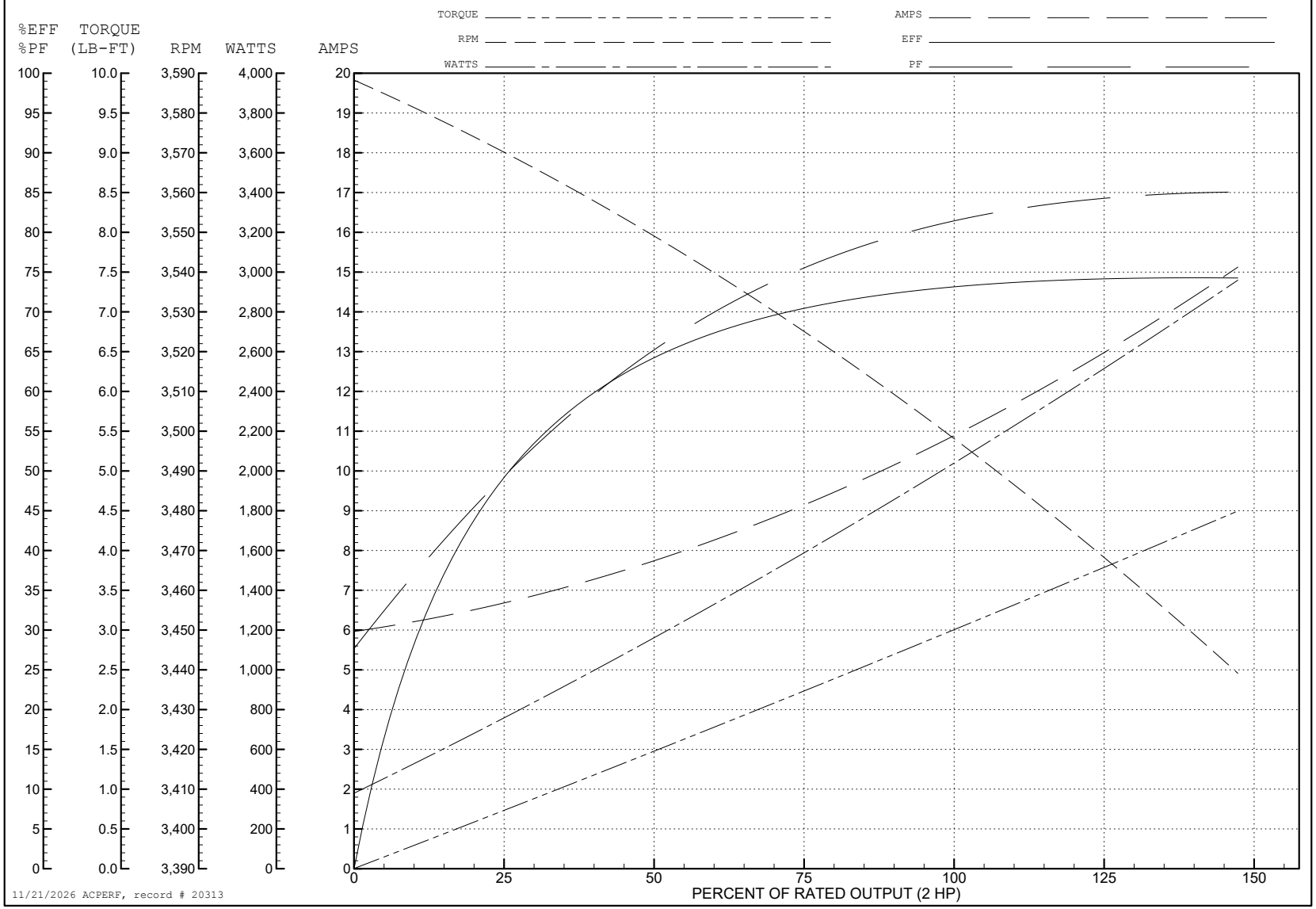
ABB Motors and Mechanical Inc.

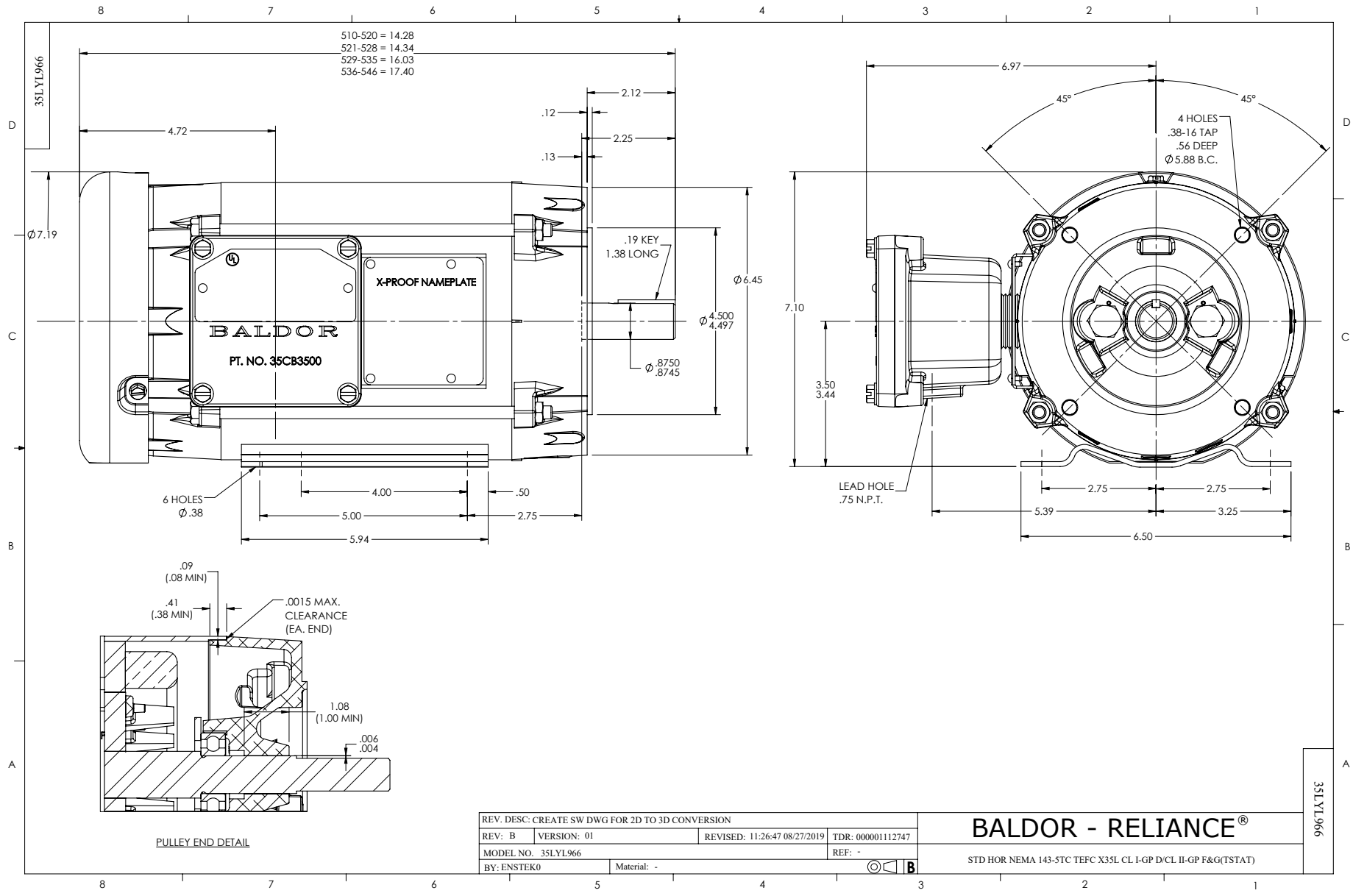
WINDING # 35WG0506

2 HP 1 PH 60 HZ 3450 RPM 230 V 3535L

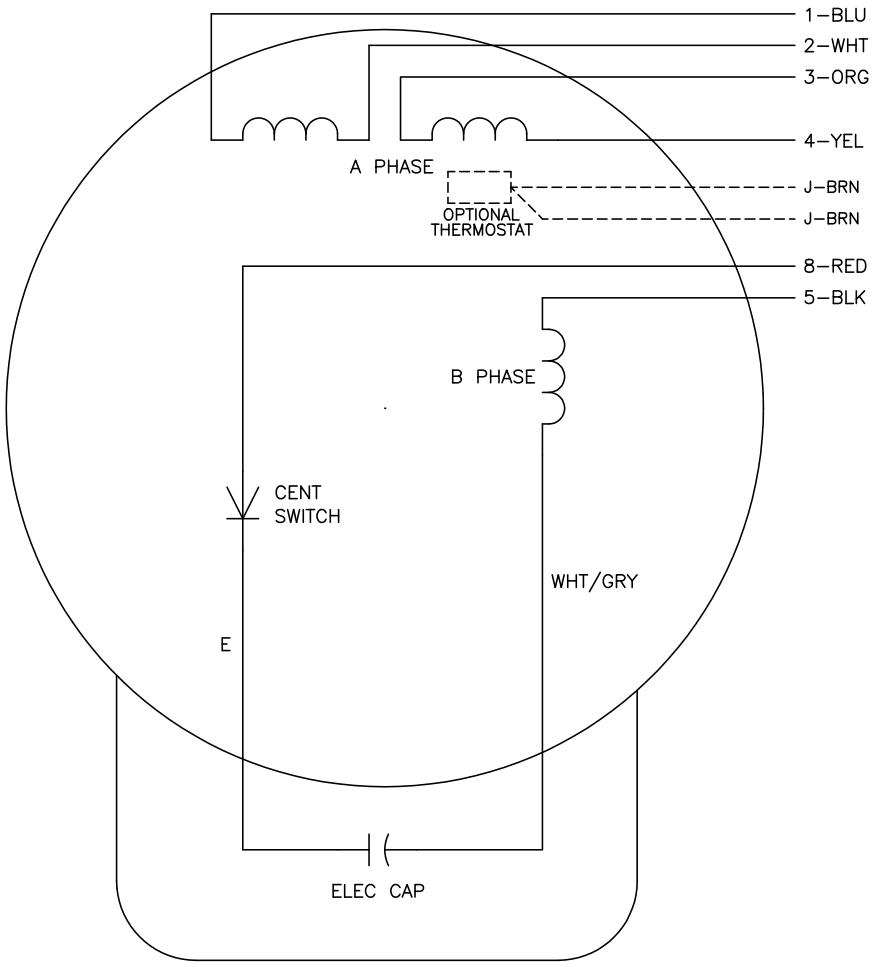
Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=9 PU=6 LR=7.5 LRA=78




35LYL966
510-520 = 14.28
521-528 = 14.34
529-535 = 16.03
536-546 = 17.40
4.72
2.12
.12
2.25
.13
Ø7.19
.19 KEY
1.38 LONG
Ø6.45
Ø4.500
Ø4.497
Ø.8750
Ø.8745
X-PROOF NAMEPLATE
BALDOR
PT. NO. 35CB3500
6 HOLES
Ø.38
4.00
.50
5.00
2.75
5.94
6.97
45°
45°
4 HOLES
.38-16 TAP
.56 DEEP
Ø5.88 B.C.
7.10
3.50
3.44
LEAD HOLE
.75 N.P.T.
2.75
2.75
5.39
3.25
6.50
.09
(.08 MIN)
.41
(.38 MIN)
.0015 MAX.
CLEARANCE
(EA. END)
1.08
(1.00 MIN)
.006
.004
PULLEY END DETAIL
REV. DESC: CREATE SW DWG FOR 2D TO 3D CONVERSION
REV: B
VERSION: 01
REVISED: 11:26:47 08/27/2019
TDR: 000001112747
MODEL NO. 35LYL966
REF: -
BY: ENSTEK0
Material: -
BALDOR - RELIANCE®
STD HOR NEMA 143-5TC TEFC X35L CL I-GP D/CL II-GP F&G(TSTAT)
35LYL966

CD0001



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

NOTES:

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

CD0001

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: D	BY: JLP	REVISED: 04/08/99 1:16	TDR: 0178636
CD0001		FILE: AAA00007405	MDL: –
		MTL: –	TYPE L, DV, REV, 6 LEADS