ABB BALDOR RELIANCE

Customer information packet

WDL3504

.5HP, 1740RPM, 1PH, 60HZ, 56, 3520L, TEFC, F1, N
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	56
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Induction Run
Output @ Frequency	.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	CSA
	UR
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	3.450 A @ 208.0 V
	3.500 A @ 230.0 V
	7.000 A @ 115.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	66.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	3.5 a

Part Detail

Revision	F
Type	AC
Mech. spec.	35J271
Base	
Status	PRD/A
Elec. spec.	35WGG470
Layout	35LYJ271
Eff. date	06-25-2026
CD Diagram	CD0001
Poles	04
Leads	6#18
Proprietary	False
Created date	08-01-2022

Insulation Class	F
Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520L
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.23 IN
Power Factor	70
Product Family	Wash Down
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1740 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

NP1496L								
CAT.NO.	WDL3504							
SPEC.	35J271G470							
HP	.5							
VOLTS	115/230							
AMP	7/3.5							
RPM	1740							
FRAME	56	**HZ**	60			**PH**	1	
SER.F.	1.25	**CODE**	L	**DES**	N	**CLASS**	F	
NEMA-NOM-EFF	66	**PF**	70					
RATING	40C AMB-CONT							
CC								
DE	6205	**ODE**	6203					
ENCL	TEFC	**SN**						
	SFA 8.2/4.1							

AC Induction Motor Performance Data
Record # 94791
Typical performance - not guaranteed values

Winding: 35WGG470-R001	**Type:** 3520L	**Enclosure:** TEFC

Nameplate Data				**115 V, 60 Hz: Low Voltage Connection**	
Rated Output (HP)			.5	**Full Load Torque**	1.511 LB-FT
Volts			115/230	**Start Configuration**	direct on line
Full Load Amps			7/3.5	**Breakdown Torque**	4.22 LB-FT
R.P.M.			1740	**Pull-up Torque**	3.95 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	6.21 LB-FT
NEMA Design Code	N	**KVA Code**	L	**Starting Current**	43.3 A
Service Factor (S.F.)			1.25	**No-load Current**	5.29 A
NEMA Nom. Eff.	66	**Power Factor**	70	**Line-line Res. @ 25ºC**	1.3669 Ω A Ph 2.3003 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	62°C
S.F. Amps			8/4	**Temp. Rise @ S.F. Load**	78°C
				Locked-rotor Power Factor	98.3

Load Characteristics 115 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	35	49	61	70	77	82	77
Efficiency	42.8	57.5	63.6	65.7	65.6	63.7	65.6
Speed	1781.1	1768.1	1752.9	1735.9	1715.7	1690.5	1716
Line amperes	5.38	5.7	6.26	7.01	8.01	9.26	8.01

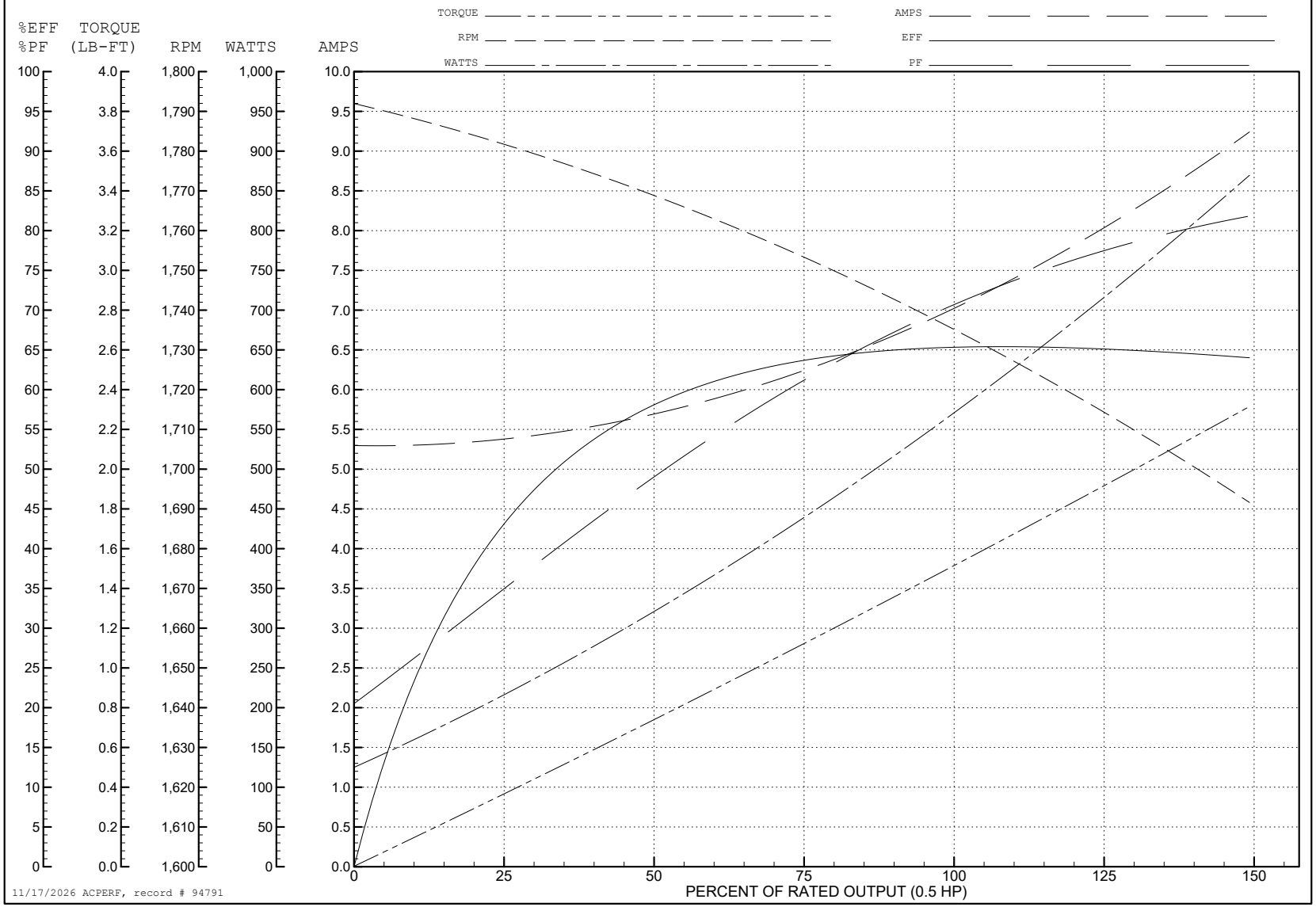
ABB Motors and Mechanical Inc.

WINDING # 35WGG470

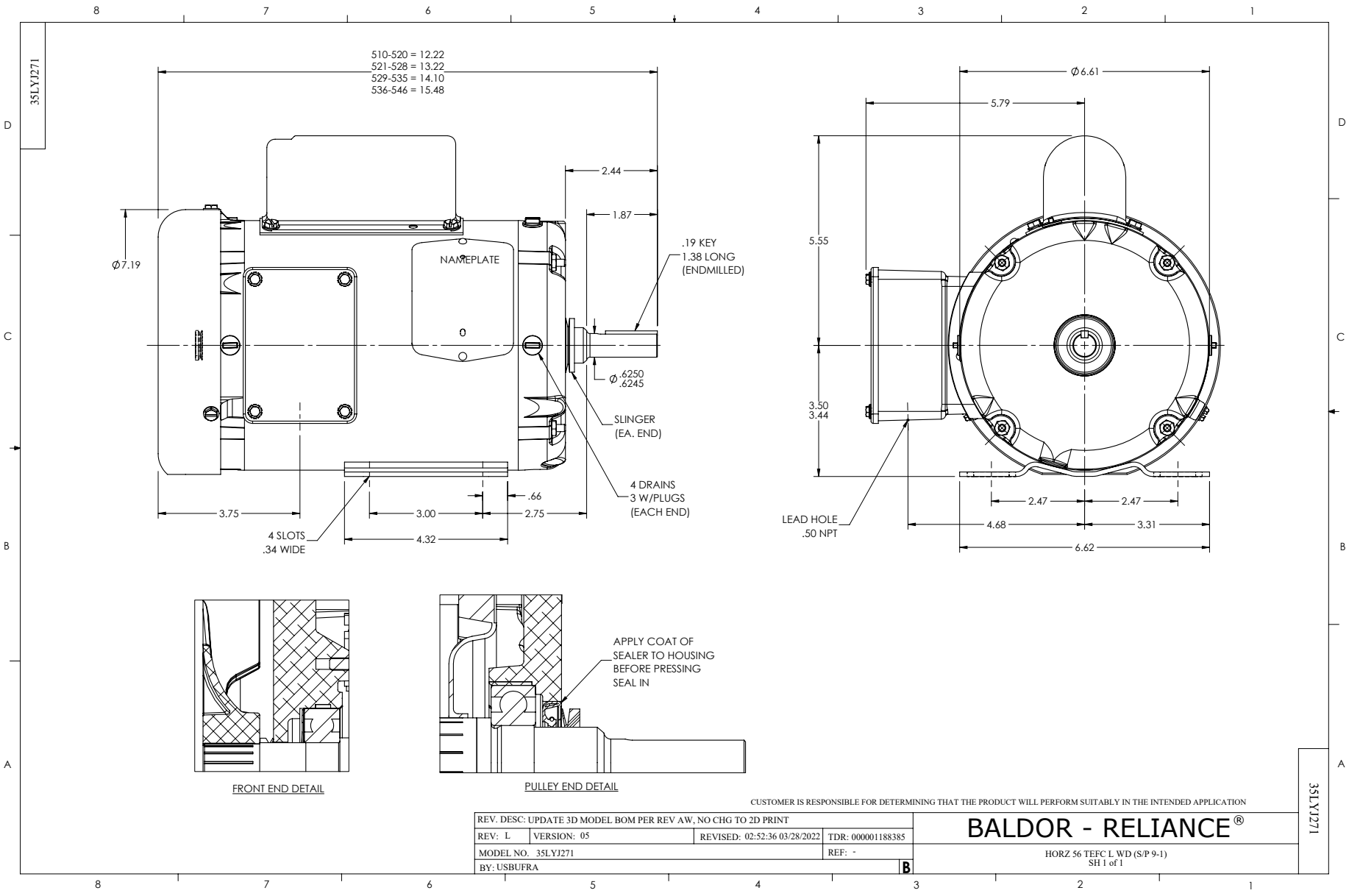
0.5 HP 1 PH 60 HZ 1740 RPM 115 V 3520L

Typical performance - not guaranteed values.

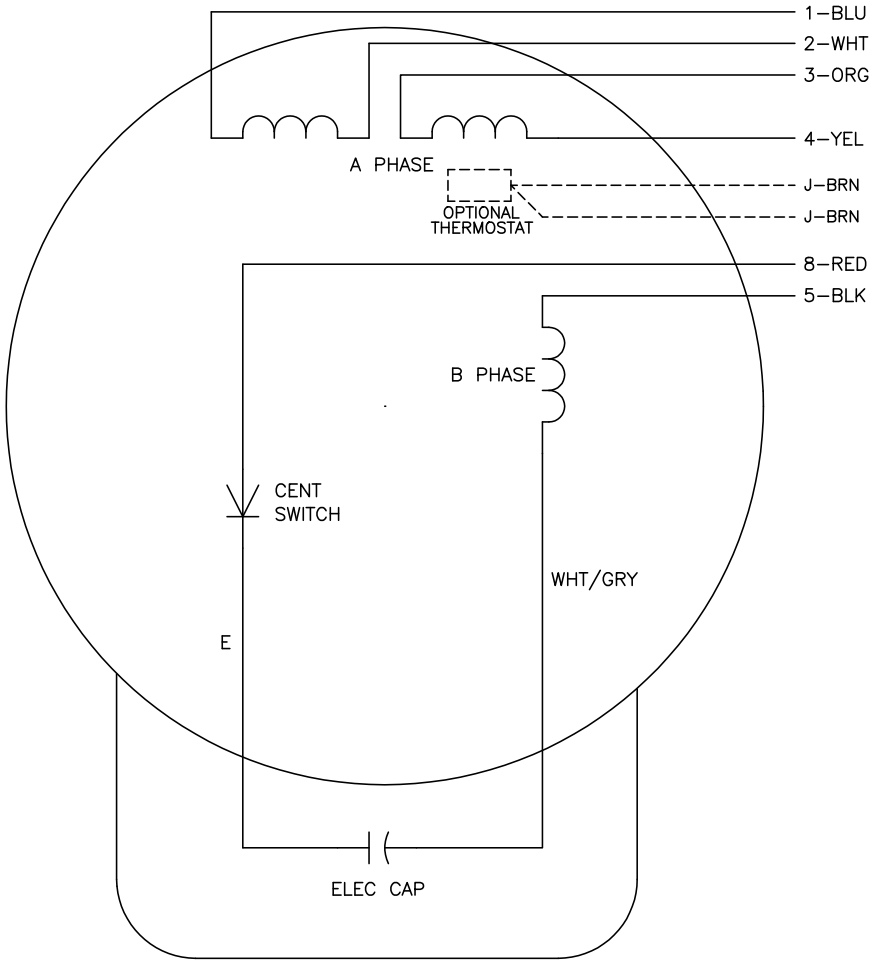
TORQUES(LB-FT): PO=4.22 PU=3.95 LR=6.21 LRA=43.3



11/17/2026 ACPERF, record # 94791


35LYJ271
510-520 = 12.22
521-528 = 13.22
529-535 = 14.10
536-546 = 15.48
2.44
1.87
Ø7.19
NAMEPLATE
.19 KEY
1.38 LONG
(ENDMILLED)
Ø .6250
Ø .6245
SLINGER
(EA. END)
4 DRAINS
3 W/PLUGS
(EACH END)
.66
3.75
3.00
2.75
4 SLOTS
.34 WIDE
4.32
Ø6.61
5.79
5.55
3.50
3.44
LEAD HOLE
.50 NPT
2.47
2.47
4.68
3.31
6.62
APPLY COAT OF
SEALER TO HOUSING
BEFORE PRESSING
SEAL IN
FRONT END DETAIL
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE 3D MODEL BOM PER REV AW, NO CHG TO 2D PRINT
REV: L
VERSION: 05
REVISED: 02:52:36 03/28/2022
TDR: 000001188385
MODEL NO. 35LYJ271
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
HORZ 56 TEFC L WD (S/P 9-1)
SH 1 of 1
35LYJ271

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