ABB BALDOR RELIANCE

Customer information packet

VFSWDL3509

1HP, 3450RPM, 1PH, 60HZ, 56C, 3524L, TEFC, F1, N
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	56C
Frame Material	Stainless 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	1.000 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	115.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	UR
	CSA
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	11.600 A @ 115.0 V
	5.800 A @ 230.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	68.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	5.8 a

Part Detail

Revision	F
Type	AC
Mech. spec.	35E4628
Base	
Status	PRD/A
Elec. spec.	35WGL350
Layout	35LYE4628
Eff. date	08-30-2023
CD Diagram	CD0648
Poles	02
Leads	4#16 A PH,3#18 B PH
Proprietary	False
Created date	06-28-2017

Insulation Class	F
Inverter Code	Not Inverter
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Finish	UNPAINTED
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	@ 0 AWG 9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524L
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.96 IN
Power Factor	80
Product Family	WD All SD Non-Encapsulated
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
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	3450 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

NP4427ALG30											
CAT #	VFSWDL3509			**WT**	41		**LBS**				
SPEC	35E4628L350G1			**ENCL**	TEFC						
SER #				**CC**			**IP**	69			
HP	1						**NEMA NOM. EFF**			68	
VOLTS	115/230										
AMPS	11.6/5.8						**PF**	80			
RATING	40C AMB-CONT										
RPM	3450										
FRAME	56C	**HZ**	60	**CODE**	K		**CLASS**		F		
SER.F.	1.25	**SF AMP**	13.8/6.9			**PH**	1	**DES**	N		
DE	6205		**ODE**	6205							
LUBRICATION	POLYREX EM										
									QR		
YR											

Parts List

Part number	Description	Quantity
SA342588	SA 35E4628L350G1	1.000 ea
RA331022	RA 35E4628L350G1	1.000 ea
EC1645B06	ELEC CAP 165V 2.0 X 4.3	1.000 ea
ES5502	115/40A,L ,CV ,165CO,.8*2.2*1.4,4-7-21	1.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35EP1940A05	FRONT TEFC 205 BRG (STAINLESS)	1.000 ea
RM1070A25	O-RING, VITON/FKM .070CS X 6.190ID	1.000 ea
HW4600G01	.984X1.499X.25 VITON SLICK SERIES LIP	1.000 ea
HW4600E99	25 X 42 X 6 AFX SEAL, GRAPHITE INFUSED V	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	4.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	4.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
35EP1935A02	PULLEY 56C/143-5TC ENCL 205 BRG	1.000 ea
RM1070A25	O-RING, VITON/FKM .070CS X 6.190ID	1.000 ea
HW4600G01	.984X1.499X.25 VITON SLICK SERIES LIP	1.000 ea
HW4600E99	25 X 42 X 6 AFX SEAL, GRAPHITE INFUSED V	1.000 ea
RM1070A26	O-RING,4.5MM I.D.X1.5MM C.S. (VITON)	4.000 ea
35FH4005A39	IEC FH NO GREASER DEBURR/CLEAN - SS	1.000 ea
10XN1032FS06	HEX HD CAP SCREW 10-32 X 3/8 SS FOOD SAF	3.000 ea
35CB1510A01G	35 CB LID SINGLE PHASE MACHINED W/ FIPG	1.000 ea
10XN1032FS08	HEX HD CAP SCREW 10-32 X 1/2 SS FOOD SAF	6.000 ea
HW2502D13	SS KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.005 qt
MJ5004A93	FOOD GRADE (H1 RATED) ANTISEIZE THRD COM	0.005 ea
HA5027A09	DRAIN KIT,(2)HA4002A03 BAGGED W/LABEL	1.000 ea
WD1000A15	3-520132-2 AMP FLAG (4M/RL NON-CANC/NON-	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
19XB0818S12	8-18X3/4 HXWS TYB HIGH-LOW	1.000 ea
WD5603A04	KIT, CLOSED-END LEAD SPLICE (18-14GA)	1.000 ea

34GS5003A01	FOAM SLEEVE, ID = 2 1/16" X 4 3/8"	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
FE-0000016	ZTRG FE ASSEMBLY	1.000 ea
HA3100FS25	THRUBOLT, 10-32 X 9.500 SS FOOD SAFE	4.000 ea
PE-0000010	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data
Record # 67393
Typical performance - not guaranteed values

Winding: 35WGL350-R001	**Type:** 3524L	**Enclosure:** TEFC

Nameplate Data				**230 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1	**Full Load Torque**	1.516 LB-FT
Volts			115/230	**Start Configuration**	direct on line
Full Load Amps			11.6/5.8	**Breakdown Torque**	4.11 LB-FT
R.P.M.			3450	**Pull-up Torque**	3.53 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	5.64 LB-FT
NEMA Design Code	N	**KVA Code**	K	**Starting Current**	39.5 A
Service Factor (S.F.)			1.25	**No-load Current**	3.55 A
NEMA Nom. Eff.	68	**Power Factor**	80	**Line-line Res. @ 25ºC**	2.097 Ω A Ph 1.1004 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	75°C
S.F. Amps			13.8/6.9	**Temp. Rise @ S.F. Load**	100°C

Load Characteristics 230 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	57	69	77	81	85	87	85
Efficiency	36.9	52.1	60.8	65.3	66.8	66.9	66.8
Speed	3564.8	3547.2	3529	3511.3	3485.8	3458.1	3486
Line amperes	3.96	4.63	5.38	6.19	7.28	8.44	7.28

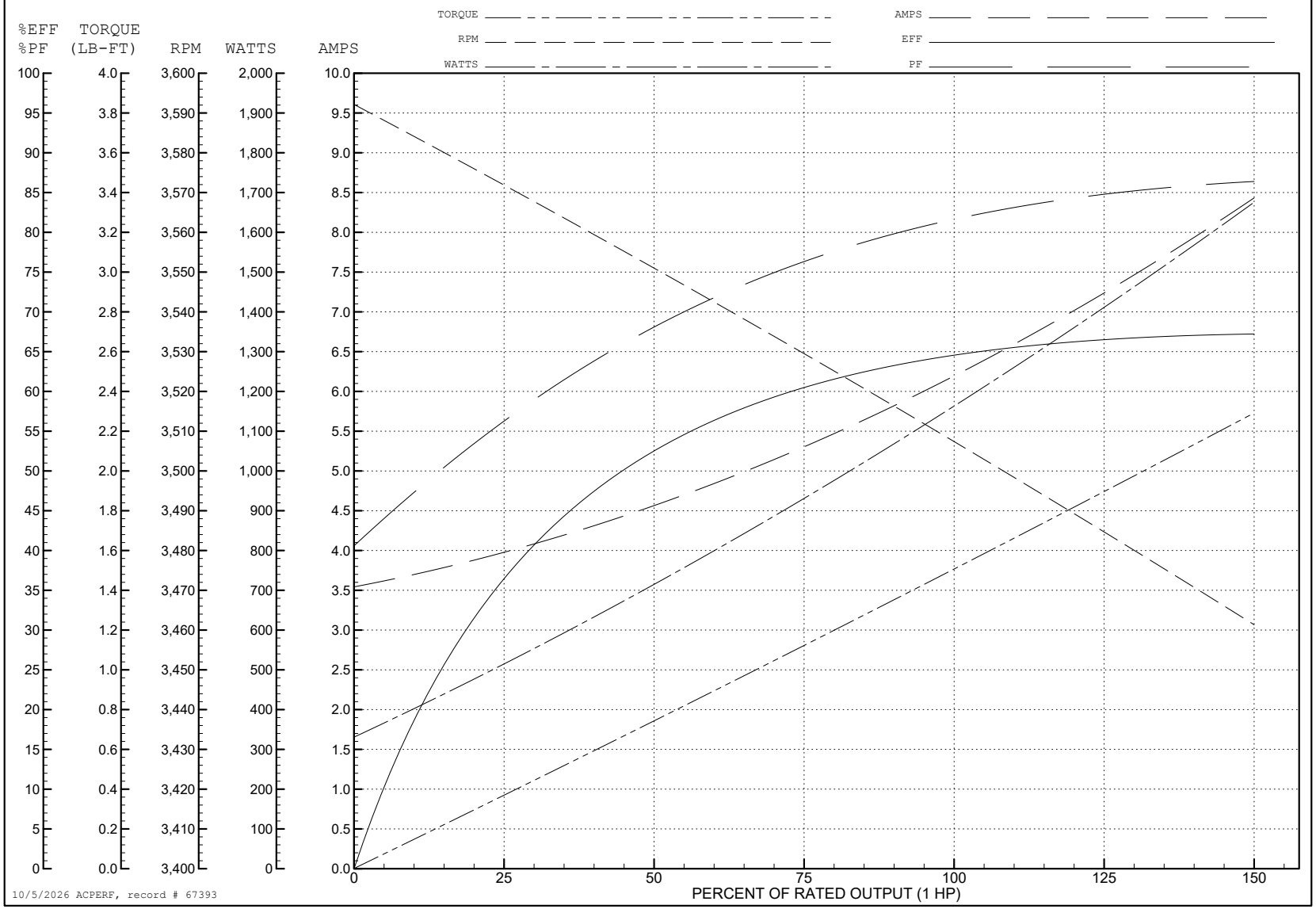
ABB Motors and Mechanical Inc.

WINDING # 35WGL350

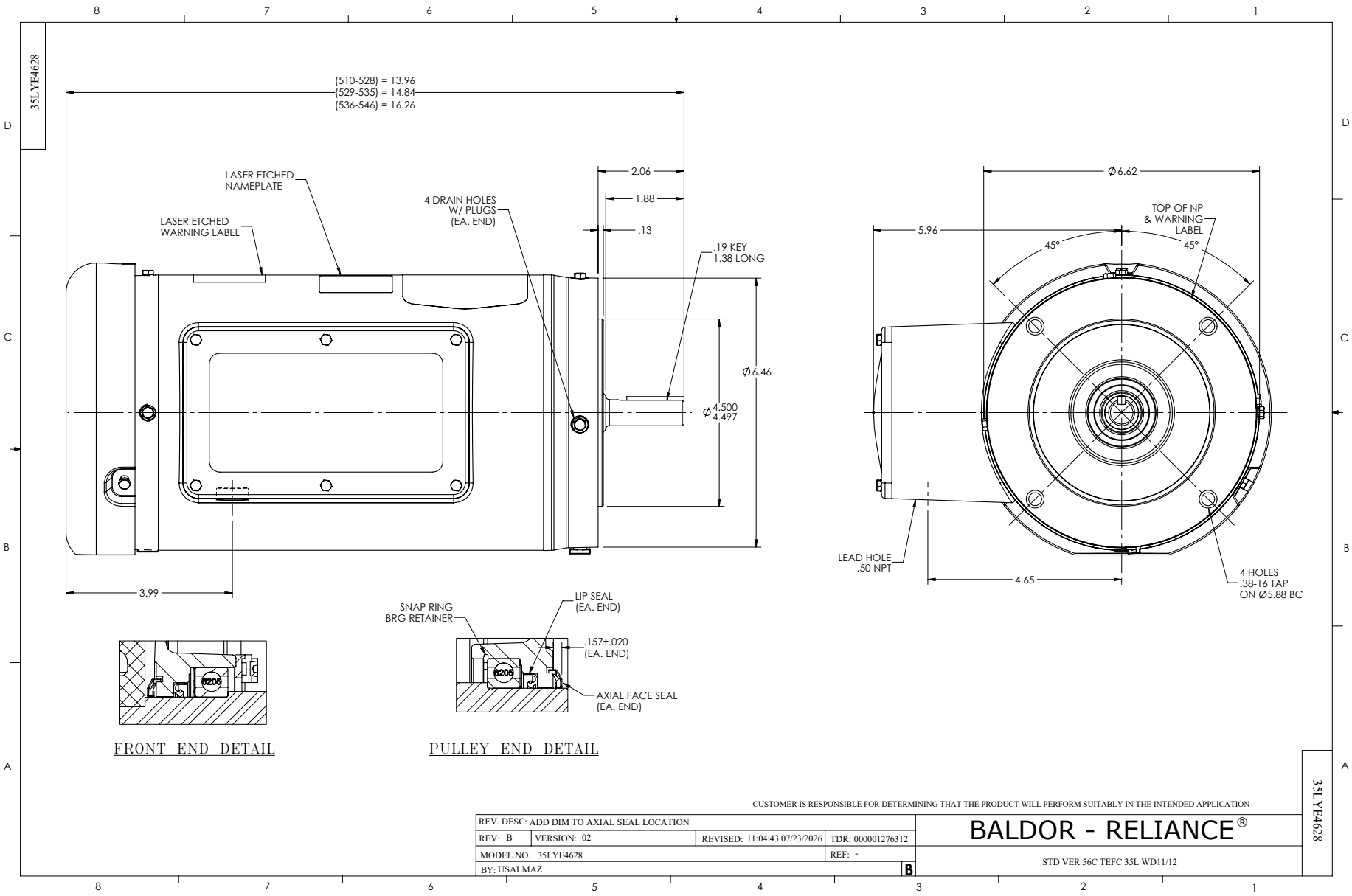
1 HP 1 PH 60 HZ 3450 RPM 230 V 3524L

Typical performance - not guaranteed values.

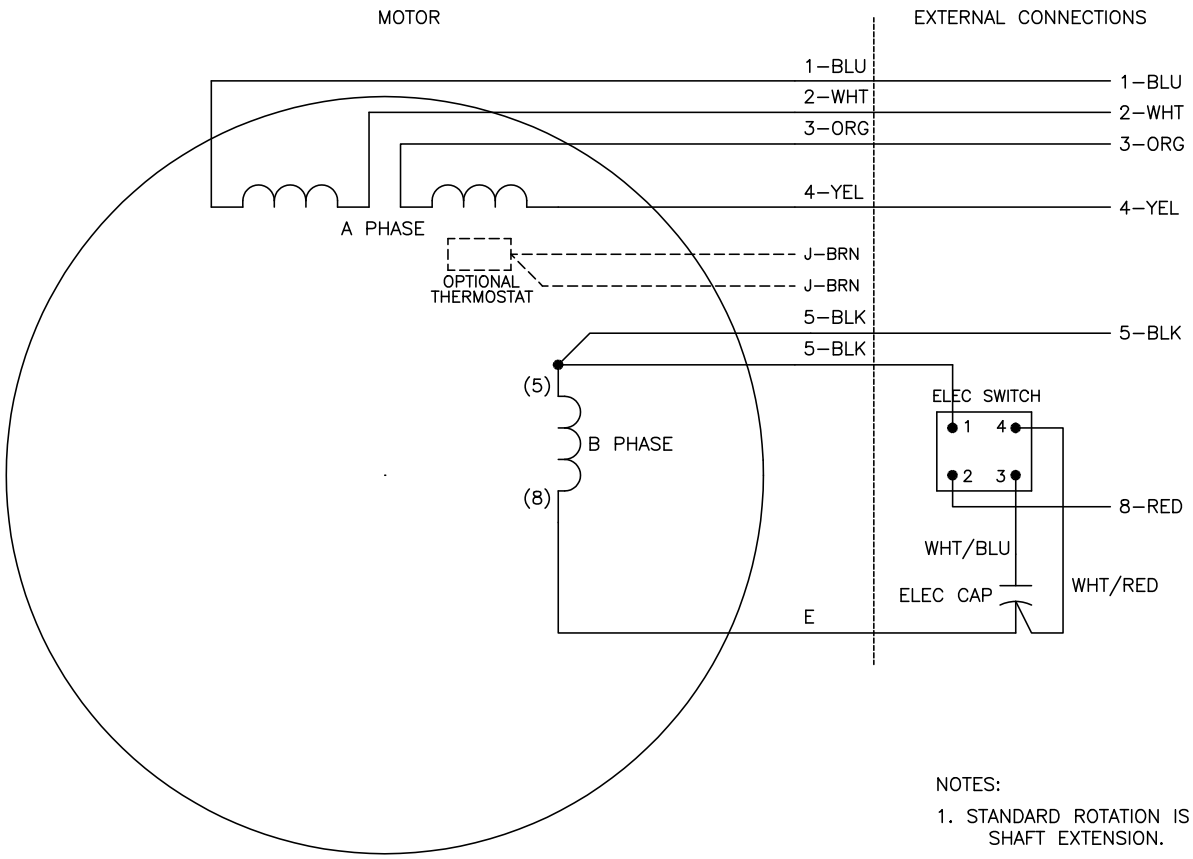
TORQUES(LB-FT): PO=4.11 PU=3.53 LR=5.64 LRA=39.5



10/5/2026 ACPERF, record # 67393


35LYE4628
(510-528) = 13.96
(529-535) = 14.84
(536-546) = 16.26
LASER ETCHED NAMEPLATE
LASER ETCHED WARNING LABEL
4 DRAIN HOLES W/ PLUGS (EA. END)
2.06
1.88
.13
.19 KEY 1.38 LONG
Ø6.46
Ø4.500 4.497
3.99
Ø6.62
TOP OF NP & WARNING LABEL
5.96
45°
45°
LEAD HOLE .50 NPT
4.65
4 HOLES .38-16 TAP ON Ø5.88 BC
SNAP RING BRG RETAINER
LIP SEAL (EA. END)
.157±.020 (EA. END)
AXIAL FACE SEAL (EA. END)
6206
6206
FRONT END DETAIL
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD DIM TO AXIAL SEAL LOCATION
REV: B
VERSION: 02
REVISED: 11:04:43 07/23/2026
TDR: 000001276312
MODEL NO. 35LYE4628
REF: -
BY: USALMAZ
B
BALDOR - RELIANCE®
STD VER 56C TEFC 35L WD11/12
35LYE4628

CD0648



	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. USE STEARNS ELECTRONIC START SWITCH OR EQUIVALENT.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0648

REV. DESC: ADD OPTIONAL LEAD COLORS			BALDOR ELECTRIC Co.
REV. LTR: B	BY: JLP	REVISED: 12/04/00 10:12	TDR: 0226347
CD0648		FILE: AAA00011416	REF: –
		MTL: –	TYPE L, DV, REV, 6 LEAD, SEPERATE CAP AND ELECTRONIC SWITCH