ABB BALDOR RELIANCE

Customer information packet

CWDL3509

1HP, 3450RPM, 1PH, 60HZ, 56C, 3520L, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	56C
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	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	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	11.800 A @ 115.0 V
	5.900 A @ 230.0 V
	6.100 A @ 208.0 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

Part Detail

Revision	AQ
Type	AC
Mech. spec.	35T985
Base	
Status	PRD/A
Elec. spec.	35WGX964
Layout	35LYT985
Eff. date	07-31-2024
CD Diagram	CD0001
Poles	02
Leads	4#16 A PH,2#18 B PH
Proprietary	False
Created date	06-22-2007

High Voltage Full Load Amps	5.9 a
Insulation Class	F
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 @ 16 AWG, A PH
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520L
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.23 IN
Power Factor	82
Product Family	Wash Down
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	Shaft 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

NP1496L									
CAT.NO.	CWDL3509								
SPEC.	35T985X964G1								
HP	1								
VOLTS	115/230								
AMP	11.8/5.9								
RPM	3450								
FRAME	56C	**HZ**	60			**PH**	1		
SER.F.	1.25	**CODE**	K	**DES**	N	**CLASS**	F		
NEMA-NOM-EFF	68	**PF**	82						
RATING	40C AMB-CONT								
CC									
DE	6205	**ODE**	6203						
ENCL	TEFC	**SN**							
	SFA 14/7								

Parts List

Part number	Description	Quantity
SA111053	SA 35T985X964G1	1.000 ea
RA102432	RA 35T985X964G1	1.000 ea
EC1645A06SP	ELEC CAP, 645-774 MFD, 125V, 2.06D X 4.	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3008A01G	SPL CONDUIT BOX, MACHINED GRAY	1.000 ea
35GS1039	05 MOLDED GASKET W/LIP, 1.12 LEAD HOLE,	1.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35EP3122B00W	MASTER ODE,203 BRG,.683SH,.125NPT DRNS,F	1.000 ea
HW4072A01	BLACK DRAIN PLUG FOR .125 NPT	3.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3307E00W	MASTER DE,205 BRG,1.623SH,.125NPT DRNS,C	1.000 ea
HW4072A01	BLACK DRAIN PLUG FOR .125 NPT	3.000 ea
HW4600B49	SEAL 0.938 X 1.624 X 0.250 SINGLE LIP DB	1.000 ea
12XN1032S20	10-32 X 1-1/4 HEX M.S. , STAINLESS STEEL	2.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH4005A32	IEC FH NO GRSR W/3 HOLES - PRIMED	1.000 ea
11XW1032S06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	3.000 ea
35CB4522	35 LIPPED CB LID PRIMED	1.000 ea
35GS1030A02	35 GS FOR CB LID - WHITE NEOPRENE	1.000 ea
59XW0832S07	TAPTITE II,HEX WSHR UNSLTD SER,410 S.S.,	4.000 ea
HW4600B39SP	V-RING SLINGER 0.550 X 0.790 X .18 VITON	1.000 ea
HW4600B46	V-RING SLINGER 0.875 X 1.420 X .24 VITON	1.000 ea
HW2502D13	SS KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
LB1164	LABEL,WARNING AND DRAIN	1.000 ea
HA5027A02	HA4054 T-DRAIN X2 BAGGED WITH 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

35GS1016A03	GASKET, CAPAC BOX FOR 35CB4802 WD MOTORS	1.000 ea
MG1025W01	WILKOFAST, 781.01, SIGNAL WHITE #9003	0.017 ga
MG1500Y02	WILKOPON PRIMER YELLOW	0.007 ga
HA3100S08	THRUBOLT 7.375LG SS	4.000 ea
SP5051A24	MODEL 35 TORQ STATIONARY SWITCH FOR "L"	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
35CB4802A02SP	CAPACITOR COVER, STAMPED X	1.000 ea
51XB1016A06	10-16X3/8 HXWSSLD SERTYB	4.000 ea
LC0001	CONN LABEL TYPE L, 6 LEAD, DUAL VOLTS, R	1.000 ea
NP1496L	SS WD UL CC	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea
PE-0000002	ZRTG PE ASSEMBLY	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data
Record # 20606
Typical performance - not guaranteed values

Winding: 35WGX964-R004	**Type:** 3520L	**Enclosure:** TEFC

Nameplate Data				**230 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1	**Full Load Torque**	1.5 LB-FT
Volts			115/230	**Start Configuration**	direct on line
Full Load Amps			11.8/5.9	**Breakdown Torque**	4.25 LB-FT
R.P.M.			3450	**Pull-up Torque**	3.5 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	4.75 LB-FT
NEMA Design Code	N	**KVA Code**	K	**Starting Current**	38 A
Service Factor (S.F.)			1.25	**No-load Current**	3.2 A
NEMA Nom. Eff.	68	**Power Factor**	82	**Line-line Res. @ 25ºC**	2 Ω A Ph 1.77 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	72°C
S.F. Amps			14/7	**Temp. Rise @ S.F. Load**	90°C

Load Characteristics 230 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	47	64	72	80	84	86	84
Efficiency	50	61	67	68	67	64.5	67
Speed	3560	3525	3485	3450	3400	3340	3400
Line amperes	3.5	4.2	5	5.9	7	8.4	7

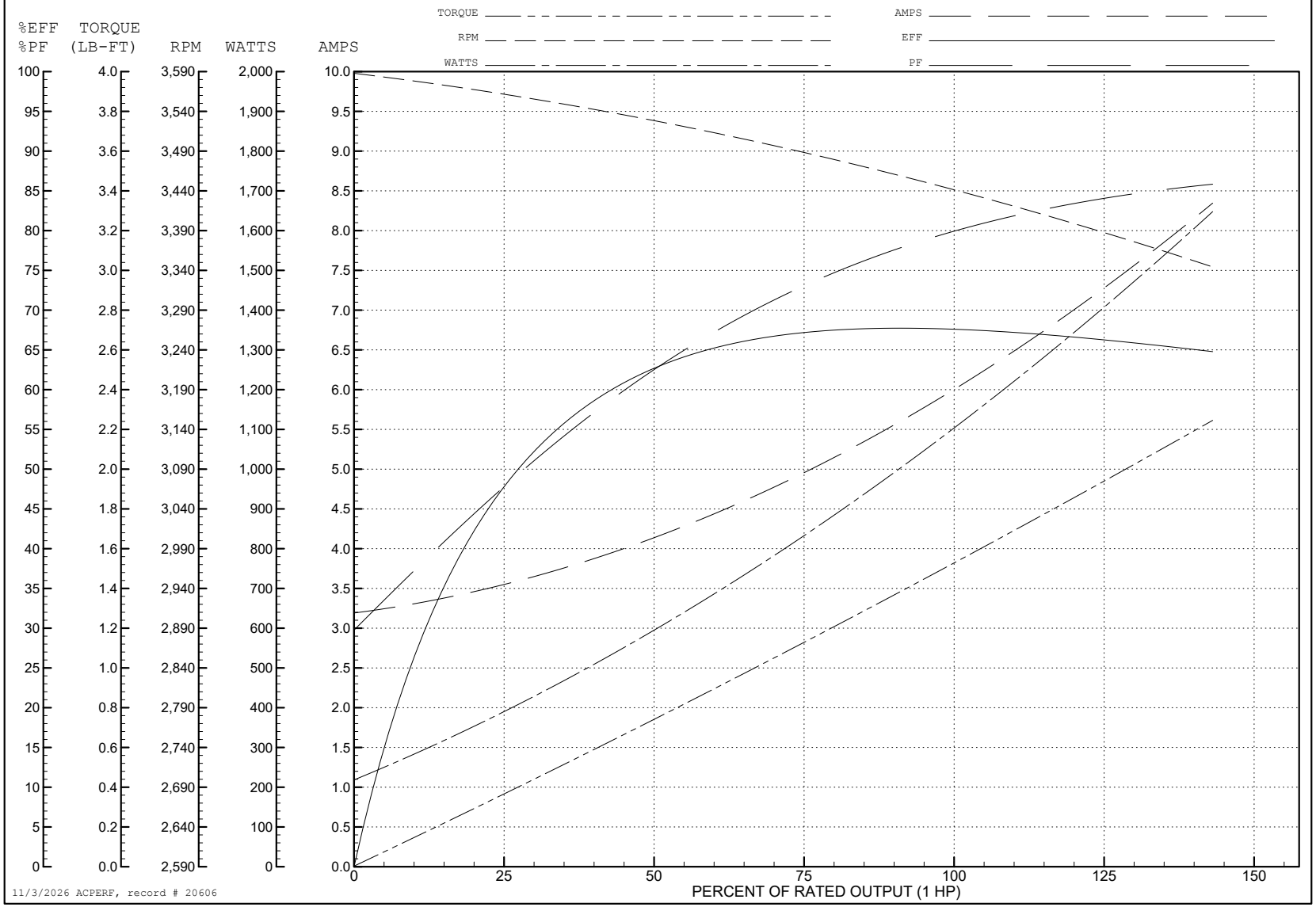
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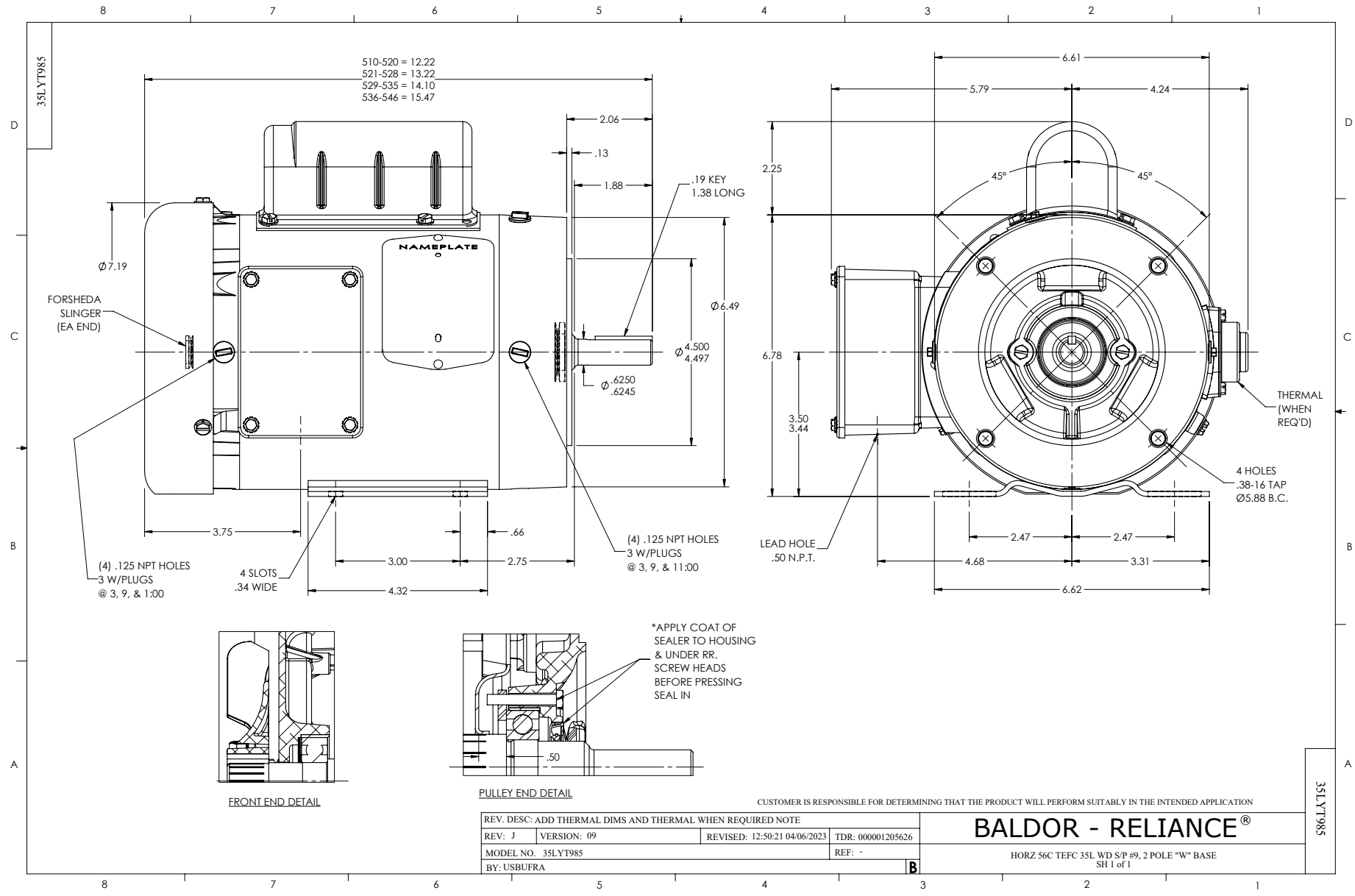
WINDING # 35WGX964

1 HP 1 PH 60 HZ 3450 RPM 230 V 3520L

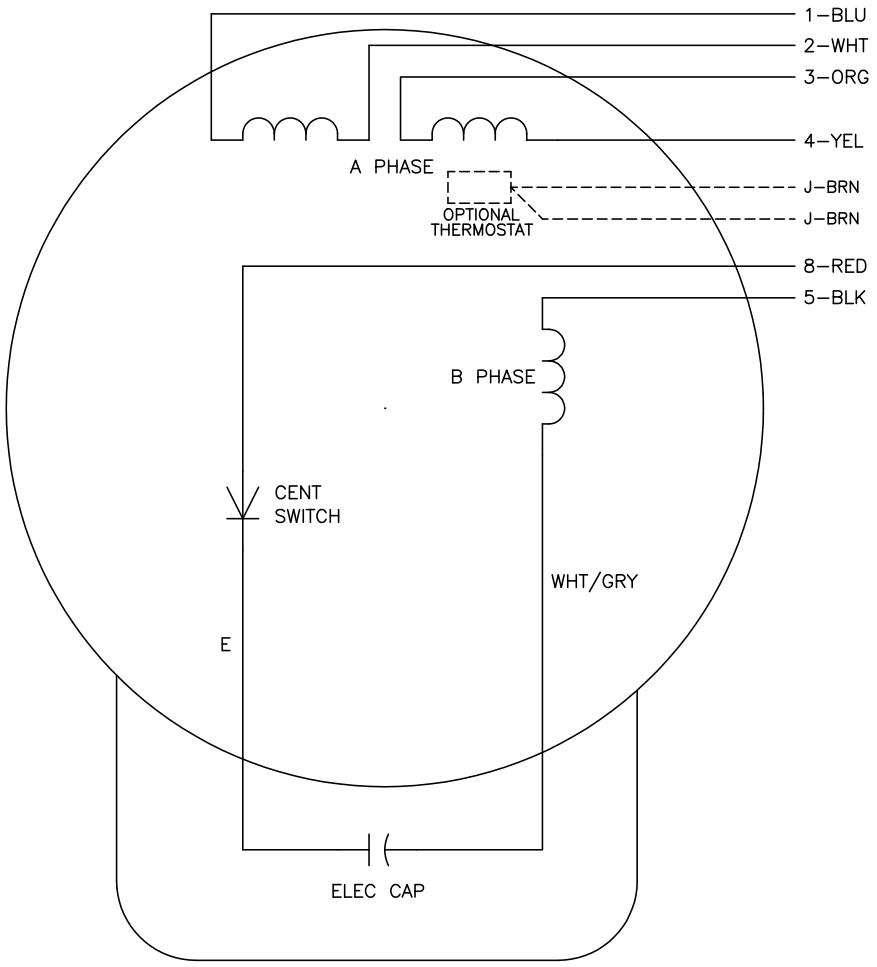
Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=4.25 PU=3.5 LR=4.75 LRA=38




35LYT985
510-520 = 12.22
521-528 = 13.22
529-535 = 14.10
536-546 = 15.47
2.06
.13
1.88
.19 KEY
1.38 LONG
NAMEPLATE
Ø7.19
FORSHEDA
SLINGER
(EA END)
Ø6.49
Ø4.500
4.497
Ø.6250
.6245
3.75
.66
3.00
2.75
4.32
(4) .125 NPT HOLES
3 W/PLUGS
@ 3, 9, & 1:00
4 SLOTS
.34 WIDE
(4) .125 NPT HOLES
3 W/PLUGS
@ 3, 9, & 11:00
6.61
5.79
4.24
2.25
45°
45°
6.78
3.50
3.44
THERMAL
(WHEN
REQ'D)
4 HOLES
.38-16 TAP
Ø5.88 B.C.
LEAD HOLE
.50 N.P.T.
2.47
2.47
4.68
3.31
6.62
*APPLY COAT OF
SEALER TO HOUSING
& UNDER RR.
SCREW HEADS
BEFORE PRESSING
SEAL IN
.50
FRONT END DETAIL
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD THERMAL DIMS AND THERMAL WHEN REQUIRED NOTE
REV: J
VERSION: 09
REVISED: 12:50:21 04/06/2023
TDR: 000001205626
MODEL NO. 35LYT985
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
HORZ 56C TEFC 35L WD S/P #9, 2 POLE "W" BASE
SH 1 of 1
35LYT985

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