ABB BALDOR RELIANCE

Customer information packet

JL3516A

2HP, 1730RPM, 1PH, 60HZ, 56J, 3536LC, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	56J
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Cap Run
Output @ Frequency	2.000 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	C UR US
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	17.200 A @ 115.0 V
	8.600 A @ 230.0 V
Design Code	L
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	78.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	8.6 a
Insulation Class	F
Inverter Code	Not Inverter

Part Detail

Revision	E
Type	AC
Mech. spec.	35N778
Base	
Status	PRD/A
Elec. spec.	35WGK256
Layout	35LYN778
Eff. date	07-28-2025
CD Diagram	CD0308
Poles	04
Leads	4#16 A&J,1#14 #4TH
Proprietary	False
Created date	02-13-2024

KVA Code	H
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	4 @ 16 AWG, A&J
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3536LC
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.97 IN
Power Factor	95
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Ext Thread
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Fixed Opposite Standard
Shaft Slinger Indicator	No Slinger
Speed	1730 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	KO
Winding Thermal 2	None

Nameplate

NP1257L									
CAT.NO.	JL3516A								
SPEC.	35N778K256G1								
HP	2								
VOLTS	115/230								
AMP	17.2/8.6								
RPM	1730								
FRAME	56J		**HZ**	60		**PH**	1		
SER.F.	1.15	**CODE**	H	**DES**	L	**CL**	F		
NEMA-NOM-EFF	78	**PF**	95						
RATING	40C AMB-CONT								
CC									
DE	6205	**ODE**	6203						
ENCL	TEFC	**SN**							

Parts List

Part number	Description	Quantity
SA422498	SA 35N778K256G1	1.000 ea
RA414503	RA 35N778K256G1	1.000 ea
OC3050C09	CYL OIL CAP 50MFD/240V	1.000 ea
TPCRJ38CY	THERMAL 1PH 1.00 AUT 120C	1.000 ea
EC1540A06SP	ELEC CAP, 540-648 MFD, 125V, 2.06D X 4.	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
51XB1214A10	12-14 X 5/8HX WS SL SR TYBX	2.000 ea
35EP3122K00	MASTER ODE,203 BRG,.683SH,#26 DRN,FH MTG	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
35CB3801	CAPACITOR COVER, CAST	1.000 ea
34GS3002	GASKET, CAPACITOR BOX	1.000 ea
HA7010	CAPACITOR RETENTION CLAMP	1.000 ea
NS2501A02	INSULATOR, CAPACITOR BOX	1.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3307G00	MASTER DE,205 BRG,1.232SH,#26 DRN	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH4005A55	IEC FH NO GRSR,3 MTG HOLE NO DIMPLES,	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
WD4100A10	465 NIAGARA PLUG (SO ELEC),FOR 1.093 DIA	1.000 ea
35CB4521GX	CONDUIT BOX LID KIT **ORDER INDIV PARTS	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1009N	LABEL,ROTATION DIRECTION (ON ROLLS)	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
35CB3007A14	35 CB .88 DIA @ 6:00, 1.00 ATO @ 3:00	1.000 ea
HA6015A02	THERMAL RETAINER (PLATED)	1.000 ea

NS2500A06	INSULATOR,AUTO THER PROT,W/PSA ON 1 SIDE	1.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.017 ga
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
WD1000A15	3-520132-2 AMP FLAG (4M/RL NON-CANC/NON-	4.000 ea
SP5181A07	MODEL 35 LC TORQ STAT SWITCH LEAD ASSY	1.000 ea
HA3100A18	THRUBOLT 10-32 X 9.250	4.000 ea
LB1118	LABEL,WARNING (ROLL LABEL)	1.000 ea
LC0093	CONN LABEL, 1 PH, DUAL VOLT, FIXED ROT	1.000 ea
NP1257L	ALUM UL CC THERMAL REV MTG	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

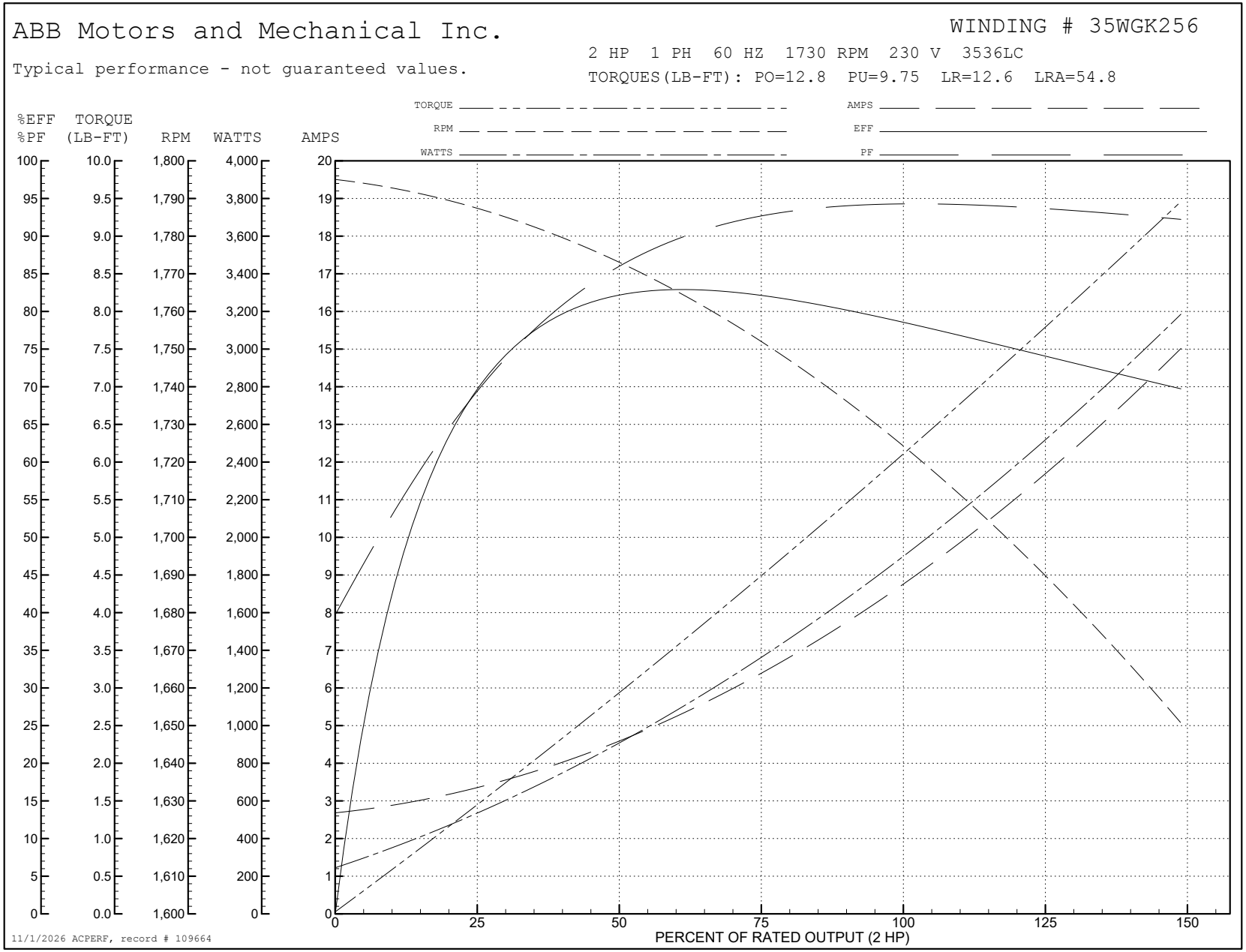
AC Induction Motor Performance Data
Record # 109664
Typical performance - not guaranteed values

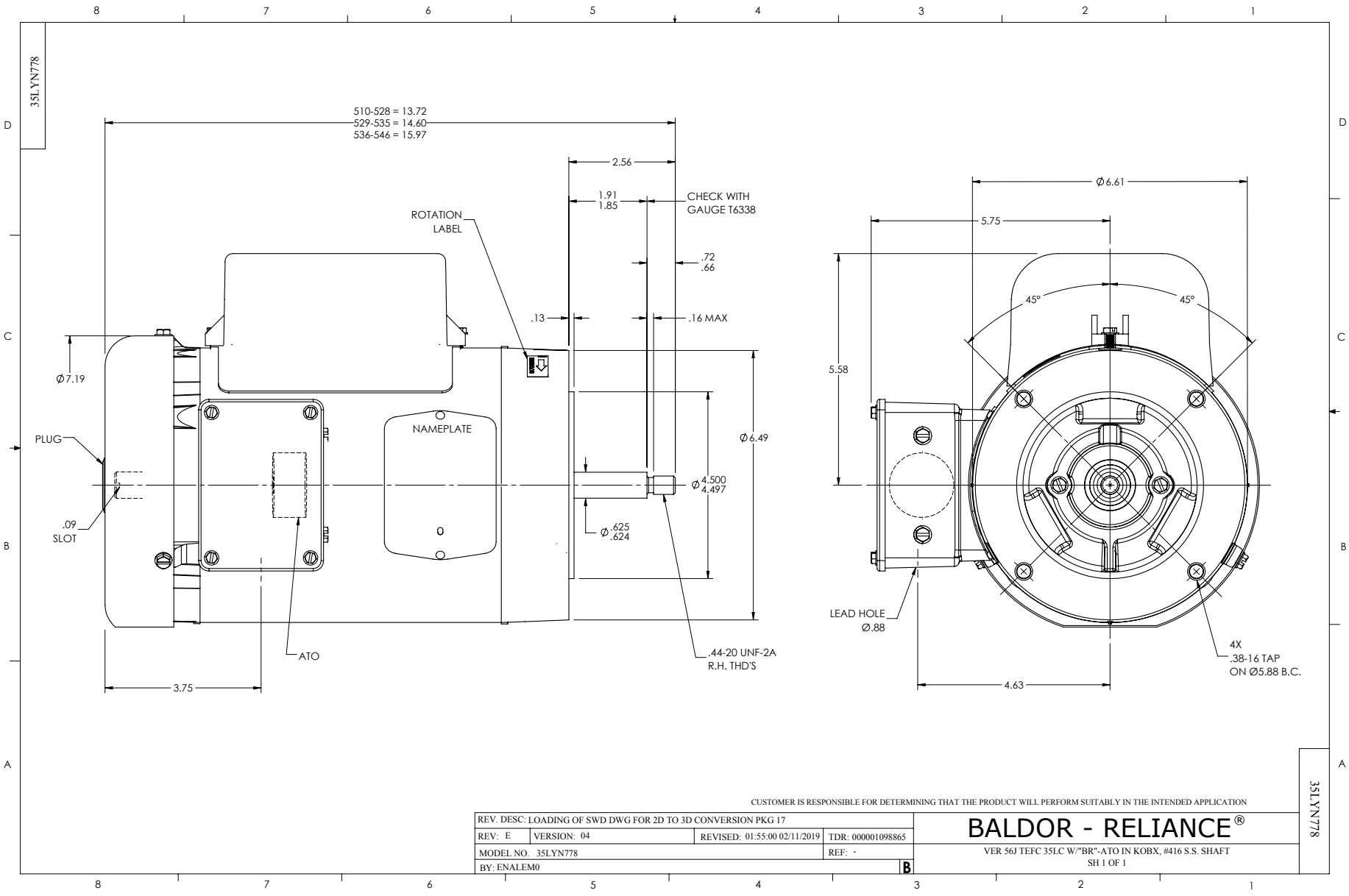
Winding: 35WGK256-R001	**Type:** 3536LC	**Enclosure:** TEFC

Nameplate Data				**230 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			2	**Full Load Torque**	6.069 LB-FT
Volts			115/230	**Start Configuration**	direct on line
Full Load Amps			17.2/8.6	**Breakdown Torque**	12.8 LB-FT
R.P.M.			1730	**Pull-up Torque**	9.75 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	12.6 LB-FT
NEMA Design Code	L	**KVA Code**	H	**Starting Current**	54.8 A
Service Factor (S.F.)			1.15	**No-load Current**	2.63 A
NEMA Nom. Eff.	78	**Power Factor**	95	**Line-line Res. @ 25ºC**	1.7787 Ω A Ph 1.9858 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	85°C
S.F. Amps				**Temp. Rise @ S.F. Load**	96°C

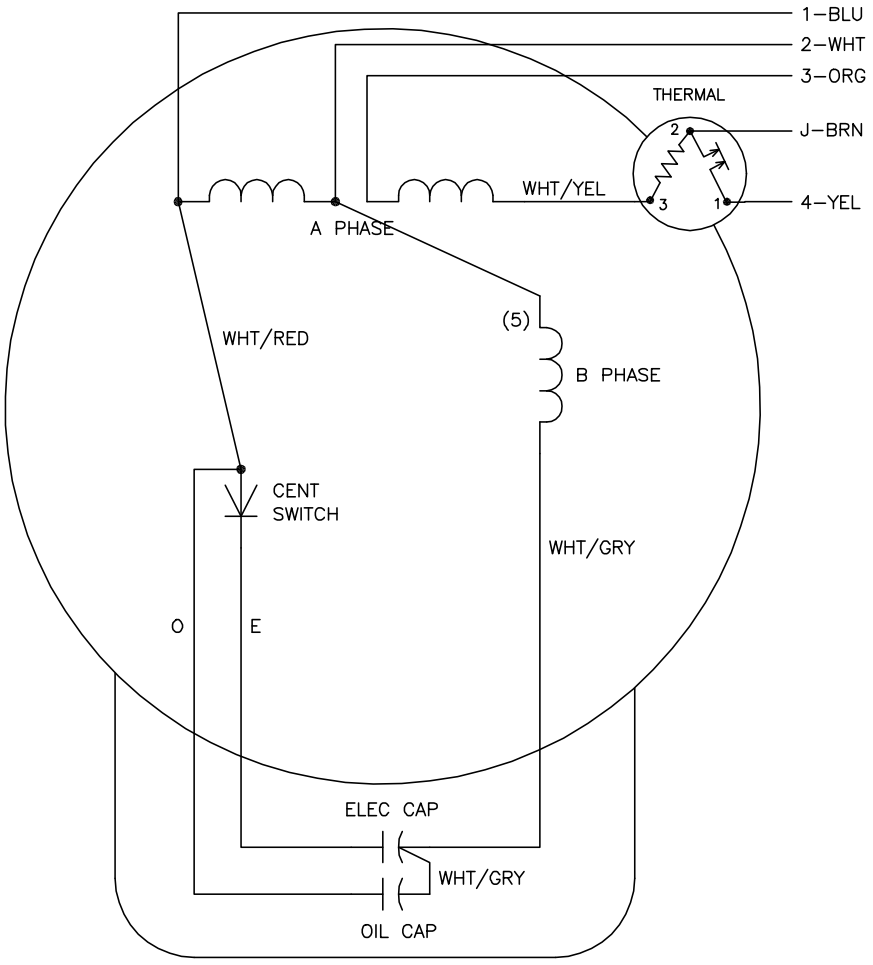
Load Characteristics 230 V, 60 Hz, 2 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	74	88	93	95	95	94	95
Efficiency	66.8	78.5	81.5	80.1	75.8	68.7	77.5
Speed	1785.2	1769.1	1751.5	1727	1695.8	1646.2	1708
Line amperes	3.33	4.73	6.49	8.66	11.4	15.2	10.3


ABB Motors and Mechanical Inc.
WINDING # 35WGK256
2 HP 1 PH 60 HZ 1730 RPM 230 V 3536LC
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=12.8 PU=9.75 LR=12.6 LRA=54.8
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (2 HP)
11/1/2026 ACPERF, record # 109664


35LYN778
510-528 = 13.72
529-535 = 14.60
536-546 = 15.97
2.56
1.91
1.85
CHECK WITH GAUGE T6338
ROTATION LABEL
.72
.66
.13
.16 MAX
Ø7.19
PLUG
.09 SLOT
NAMEPLATE
Ø6.49
Ø4.500
4.497
Ø.625
.624
ATO
3.75
.44-20 UNF-2A R.H. THD'S
Ø6.61
5.75
45°
45°
5.58
LEAD HOLE Ø.88
4.63
4X .38-16 TAP ON Ø5.88 B.C.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOADING OF SWD DWG FOR 2D TO 3D CONVERSION PKG 17
REV: E
VERSION: 04
REVISED: 01:55:00 02/11/2019
TDR: 000001098865
MODEL NO. 35LYN778
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
VER 56J TEFC 35LC W/"BR"-ATO IN KOBX, #416 S.S. SHAFT
SH 1 OF 1
35LYN778

CD0308



	LINE A	LINE B	JOIN	JOIN
HIGH	1	4	2,3	J
LOW	1,3	4	–	2,J

NOTES:

1. CONNECTIONS ARE SHOWN FOR CCW ROTATION FACING END OPPOSITE SHAFT EXTENSION (STD). FOR CW ROTATION, INTERCHANGE 5 AND 8 INTERNALLY.
2. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: ADDED CM PLANT CODE ONLY			BALDOR ELECTRIC Co.
REV. LTR: E	BY: TWD	REVISED: 09:39:48 10/24/2001	TDR: 253023
CD0308		FILE: AAA00007481	REF: CD0308
		MTL: –	TYPE LC, DV, FIX, THERMAL, B PH AMPS THRU HTR, 5 LEADS

CD0308