

ABB BALDOR RELIANCE III

Customer information packet

CJL3513A

1.5HP, 3450RPM, 1PH, 60HZ, 3528L, N

Class - None

Division - Not Applicable

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, Induction Run
Output @ Frequency	1.500 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	16.600 A @ 115.0 V 8.300 A @ 230.0 V 8.600 A @ 208.0 V
Design Code	L
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	70.0 %
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	K
Type	AC
Mech. spec.	35Z185
Base	
Status	PRD/A
Elec. spec.	35WG0525
Layout	35LYZ185
Eff. date	07-24-2024
CD Diagram	CD0094
Poles	02
Leads	4#16 A&J,1#14 #4TH
Proprietary	False
Created date	06-10-2014

High Voltage Full Load Amps	8.3 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	H
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	4 @ 16 AWG, A&J
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3528L
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.72 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Ext Thread
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.00
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Fixed Opposite Standard
Shaft Slinger Indicator	No Slinger
Speed	3450 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Do Not Use Eve-Not Valid
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	Automatic Thermal Overload



Winding Thermal 1 Location	SB
Winding Thermal 2	None

Nameplate

NP1257L											
CAT.NO.	CJL3513A										
SPEC.	35Z185-0525G1										
HP	1.5										
VOLTS	115/230										
AMP	16.6/8.3										
RPM	3450										
FRAME	56J			HZ		60		PH		1	
SER.F.	1.00	CODE	H	DES	L	CL	B				
NEMA-NOM-EFF	70	PF	82								
RATING	40C AMB-CONT										
CC											
DE	6205	ODE	6203								
ENCL	TEFC	SN									

Parts List

Part number	Description	Quantity
SA282313	SA 35Z185-0525G1	1.000 ea
RA268621	RA 35Z185-0525G1	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
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	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
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
35EP3122K00	MASTER ODE,203 BRG,.683SH,#26 DRN,FH MTG	1.000 ea
51XB1016A05	10-16X5/16HX WA SL SR TYB (F/S)	2.000 ea
35CB4802A02SP	CAPACITOR COVER, STAMPED X	1.000 ea
35GS3001A02	GASKET, CA.COVER, 5.38 LONG .06 CS301	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3307F00	MASTER DE,205 BRG,.998SH,#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
RM1010A12	.437 I.D. 1" VINYL CAP (SHORT) MOCAP	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.017 ga
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 ea
WD1000A15	3-520132-2 AMP FLAG (4M/RL NON-CANC/NON-	2.000 ea
SP5051A99	MODEL 34/35 TORQ STA SW LEAD CONFIG	1.000 ea
LB1118	LABEL,WARNING (ROLL LABEL)	1.000 ea

LB1009N	LABEL,ROTATION DIRECTION (ON ROLLS)	1.000 ea
LC0031	CONNECTION LABEL	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
NP1257L	ALUM UL CC THERMAL REV MTG	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	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 # 8080

Typical performance - not guaranteed values

Winding: 35WG0525-R001			Type: 3528L		Enclosure: TEFC		
Nameplate Data			230 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1.5	Full Load Torque		2.3 LB-FT		
Volts		115/230	Start Configuration		direct on line		
Full Load Amps		16.6/8.3	Breakdown Torque		5.6 LB-FT		
R.P.M.		3450	Pull-up Torque		4.2 LB-FT		
Hz	60 Phase	1	Locked-rotor Torque		5.5 LB-FT		
NEMA Design Code		L KVA Code	H		Starting Current		42 A
Service Factor (S.F.)		1	No-load Current		3.8 A		
NEMA Nom. Eff.		70 Power Factor	82		Line-line Res. @ 25°C		1.26 Ω A Ph 1.23 Ω B Ph
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		70°C		

Load Characteristics 230 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	52	69	78	84	87	88
Efficiency	54.9	67.7	71.6	72.4	71.2	68.4
Speed	3568	3543	3518	3485	3452	3409
Line amperes	4.4	5.4	6.6	8.3	9.9	12

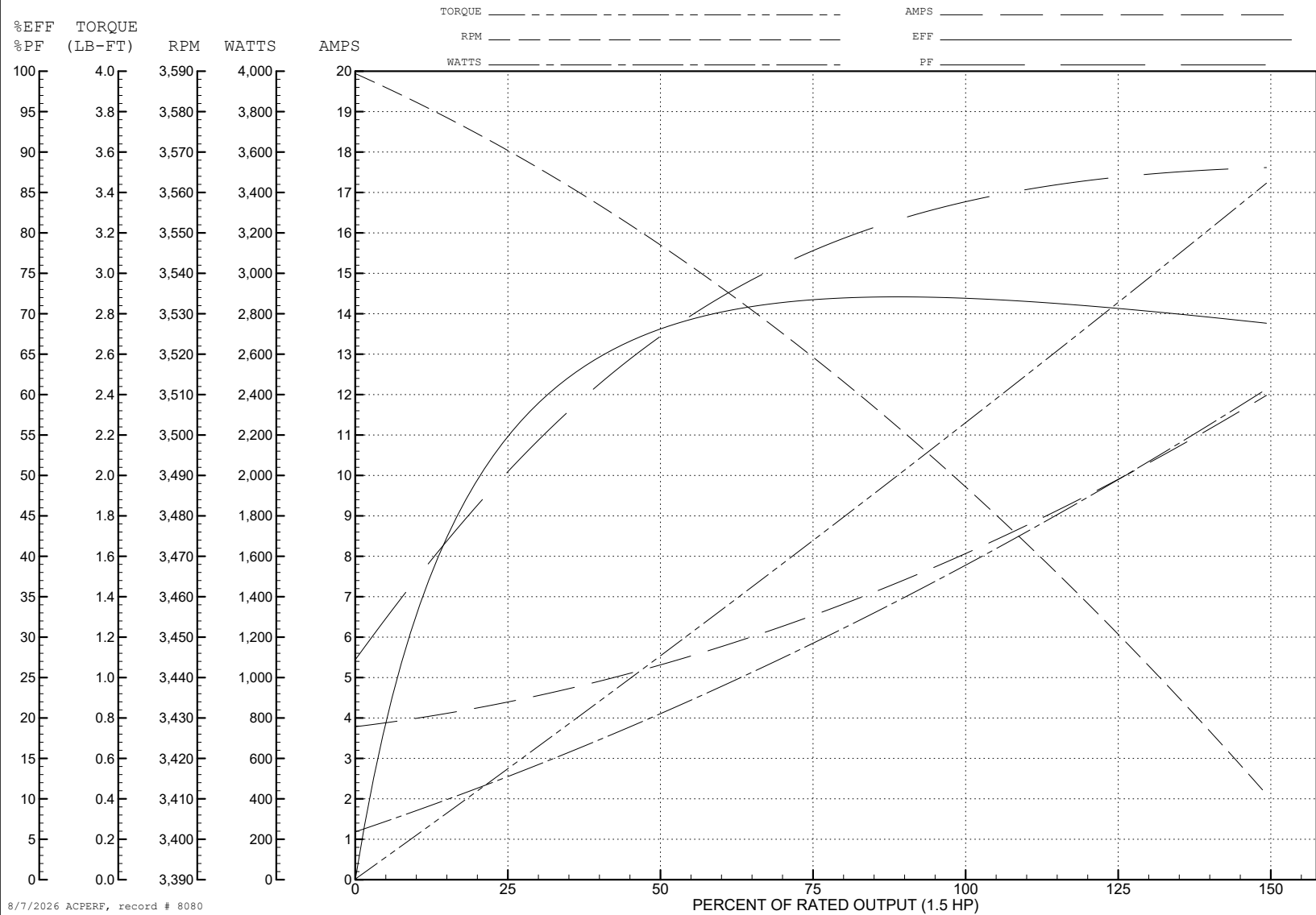
ABB Motors and Mechanical Inc.

WINDING # 35WG0525

Typical performance - not guaranteed values.

1.5 HP 1 PH 60 HZ 3450 RPM 230 V 3528L

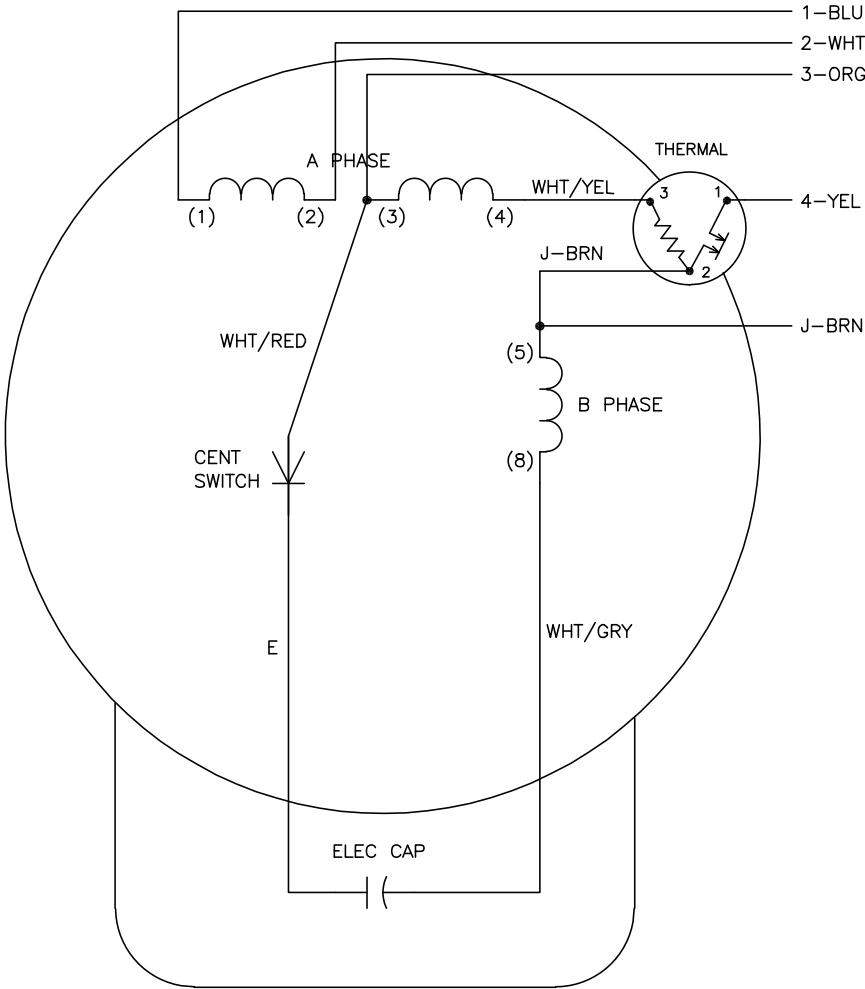
TORQUES (LB-FT): PO=5.6 PU=4.2 LR=5.5 LRA=42



REV. DESC: ADD THERMAL OPTION			
REV: D	VERSION: 04	REVISED: 09:19:24 11/29/2022	TDR: 00000120031
MODEL NO. 35LYZ185			REF: -
BY: USANEAT			

HOR 56J TEFC 35L 2 POLE "W" BASE 35BA4010
SH 1 of 1

CD0094



	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.

CD0094

REV. DESC: ADD B PH AMPS THRU HTR HVC TO DESCRIPTION		
REV. LTR: F	VERSION: 02	TDR: 000001258306
FILE: \AAA\00007\476	REVISED: 03:40:33 06/18/2025	BY: ENBRIR0
MTL: —	© □	

BALDOR - RELIANCE®

TYPE L, DV, FIX, THERMAL, B PH AMPS THRU HTR HVC, 5 LEAD
SH 1 of 1