

ABB BALDOR RELIANCE III

Customer information packet

CDRXL050544

.5HP, 1740RPM, 1PH, 60HZ, 56C, 3520L, XPFC, F1

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	56C
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Cap Start, Induction Run
Output @ Frequency	.500 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 208.0 V @ 60 HZ 115.0 V @ 60 HZ
Agency Approvals	CSA UL
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	7.000 A @ 115.0 V 3.500 A @ 230.0 V 3.450 A @ 208.0 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
Haz Area Temp Code	T3C

Part Detail

Revision	F
Type	AC
Mech. spec.	35X723
Base	
Status	PRD/A
Elec. spec.	35WGG470
Layout	35LYX723
Eff. date	05-29-2026
CD Diagram	CD0001
Poles	04
Leads	6#18
Proprietary	False
Created date	08-01-2022

Heater Indicator	No Heater
High Voltage Full Load Amps	3.5 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	X3520L
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.31 IN
Power Factor	70
Product Family	Hazardous Location Motor
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1740 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP0977XPSL												
NO.								CC				
SER.								TEMP CODE	T3C			
SPEC.	35X723G470											
CAT.NO.	CDRXL050544											
HP	.5											
VOLTS	115/208-230											
AMPS	7/3.45-3.5											
RPM	1740				MOTOR WEIGHT				43			
HERTZ	60	PH	1	CL	F	DE BRG	6205					
SER.F.	1.15	DES	N	CODE		L	ODE BRG			6203		
FRAME	56C	GREASE			POLYREX EM							
RATING	40C AMB-CONT											
				NEMA-NOM-EFF				66	PF	70		
	NEMA MG-1 PT 5,IP55											

Parts List

Part number	Description	Quantity
SA407296	SA 35X723G470	1.000 ea
RA398795	RA 35X723G470	1.000 ea
EC1270A02SP	ELEC CAP, 270-324 MFD, 125V, 1.48D X 3.	1.000 ea
EC1130A02SP	ELEC CAP, 130-156 MFD, 125V, 1.48D X 3.3	1.000 ea
35CB1005A01	CONDUIT BOX,MACH - GROUP "C" MTRS	1.000 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
35EP3700B07	FR ENDPLATE, XPFC - GROUP C, W/ DRAIN	1.000 ea
HW4506A02	BREATHER/DRAIN-EXP PROOF-.125-27 NPTF AI	1.000 ea
HW3022E05	.125 DIA X .500 ROLLED SPRING PIN	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP1704A39	PUEP 205 BRG XP GRP C W/SLINGER, DRAIN	1.000 ea
HW4506A02	BREATHER/DRAIN-EXP PROOF-.125-27 NPTF AI	1.000 ea
HW3022E05	.125 DIA X .500 ROLLED SPRING PIN	1.000 ea
HW4001A01	1/4 HX SOC PIPE PLG (F/S) ALLOY STEEL W/	2.000 ea
63XN1032A07	10-32 X 7/16 TRUSS HEAD,TORX SERRATED ZN	2.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH4005A44	FH NO GREASER & SPL NOTCH @ 7	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
35CB1501A01	CONDUIT BOX LID, MACH. - GROUP "C" MTRS	1.000 ea
RM1020A41	O-RING, -150 BUNA-N, .103 CS X 2.862 ID	1.000 ea
HA2071A02	ALUM SLINGER 205 BRG DRILL RIG MOTOR	1.000 ea
80XN1032J04	10-32 X 1/4 SET SCREW, HEX SOC, CUP PT	1.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	6.000 ea
LB1359F	ALUM XP CAUTION LABEL	1.000 ea
HA1025A21	WSHR,FELT .125" THK	1.000 ea
HA6003A52	CLAMP, CAPACITOR, WHITE ZINC PLATED	2.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea

MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
MG1025G29	WILKOFAS, 789.229, DARK CHARCOAL GRAY	0.017 ga
SP5055A11	MODEL 35 TYPE L STATIONARY SWITCH WITH L	1.000 ea
HA3104A06	THRUBOLT 5/16-18 X 8.50 OHIO ROD	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0081	CONNECTION LABEL X	1.000 ea
NP0977XPSL	SS XP UL CSA CC CL-I GP-C&D	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
84XN1032J20	SCREW, SOC 10-32 X 1 1/4"BMH4602	2.000 ea

AC Induction Motor Performance Data

Record # 94793

Typical performance - not guaranteed values

Winding: 35WGG470-R004			Type: 3520L		Enclosure: XPFC	
Nameplate Data			115 V, 60 Hz: Low Voltage Connection			
Rated Output (HP)		.5	Full Load Torque		1.511 LB-FT	
Volts		115/208-230	Start Configuration		direct on line	
Full Load Amps		7/3.45-3.5	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	Starting Current		43.3 A	
Service Factor (S.F.)		1.15	No-load Current		5.29 A	
NEMA Nom. Eff.	66 Power Factor	70	Line-line Res. @ 25°C		1.3669 Ω A Ph 2.3003 Ω B Ph	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		62°C	
S.F. Amps		8/3.8-4	Temp. Rise @ S.F. Load		72°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	74
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	1724
Line amperes	5.38	5.7	6.26	7.01	8.01	9.26	7.61

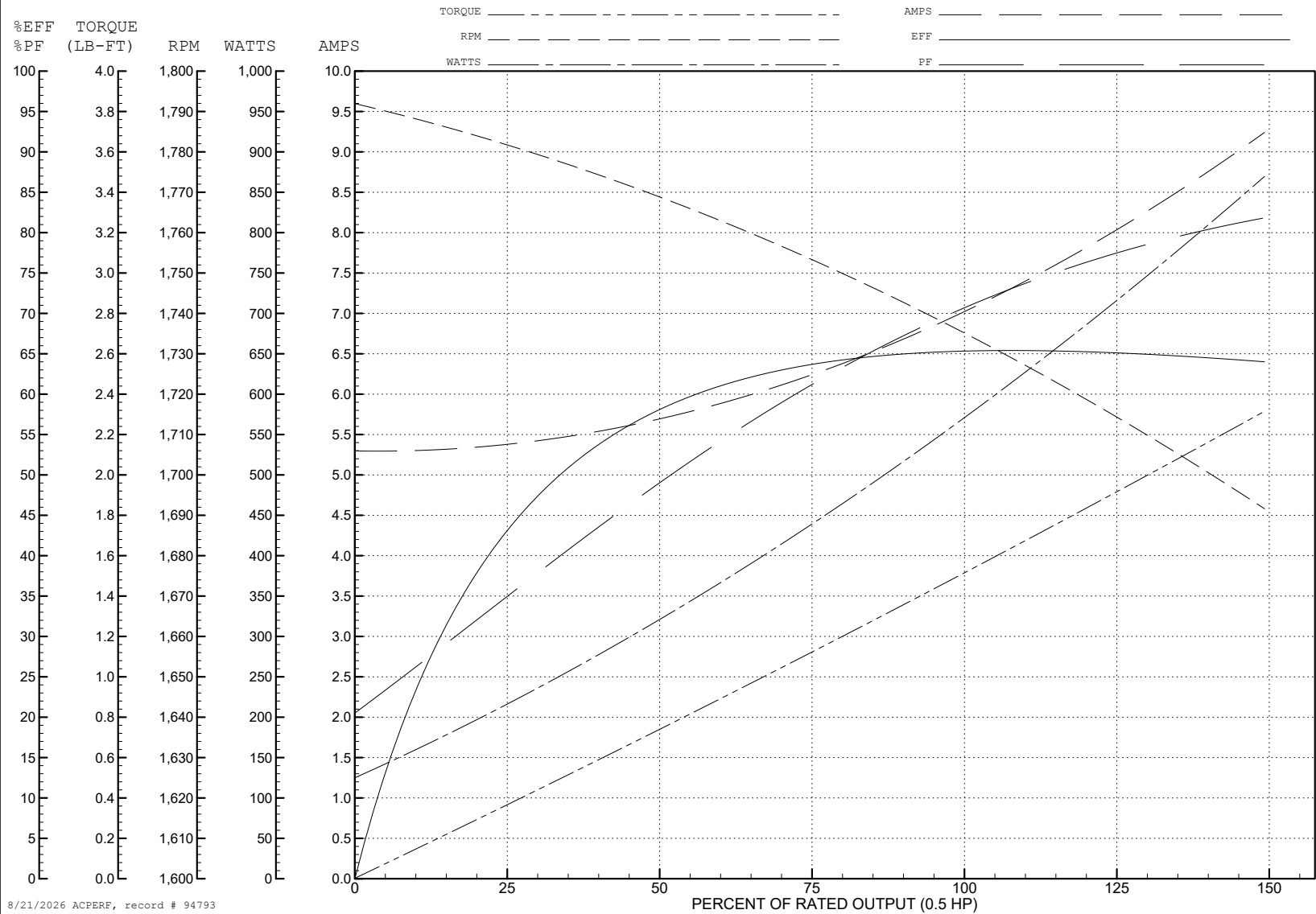
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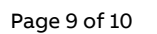
WINDING # 35WGG470

Typical performance - not guaranteed values.

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

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





CD0001

